

=> FILE REG  
FILE 'REGISTRY' ENTERED AT 15:26:05 ON 22 AUG 2008  
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=> DISPLAY HISTORY FULL L1-

FILE 'HCA' ENTERED AT 14:54:25 ON 22 AUG 2008  
L1 79562 SEA DENDRI? OR DENDRON?  
L2 18673 SEA (BRANCH? OR BRUSH? OR COMB OR COMBS OR COMBED OR  
COMBING# OR STAR OR STARS OR STARRED OR STARRING# OR  
STARBURST?) (2A) (POLYM? OR COPOLYM? OR HOMOPOLYM? OR  
TERPOLYM? OR RESIN? OR GUM#)  
L3 35 SEA L1(3A) (ALKOXYLAT? OR ETHOXYLAT? OR PROPOXYLAT?)  
L4 27 SEA L2(3A) (ALKOXYLAT? OR ETHOXYLAT? OR PROPOXYLAT?)

FILE 'HCAPLUS' ENTERED AT 14:56:02 ON 22 AUG 2008  
L5 570 SEA LEINWEBER ?/AU  
L6 270 SEA FEUSTEL ?/AU  
L7 126 SEA WASMUND ?/AU  
L8 1936 SEA RAUSCH ?/AU  
L9 0 SEA L5 AND L6 AND L7 AND L8  
L10 12 SEA L5 AND L6  
L11 6 SEA L5 AND L7  
L12 0 SEA L5 AND L8  
L13 3 SEA L6 AND L7  
L14 1 SEA L6 AND L8  
L15 0 SEA L7 AND L8  
L16 1 SEA ((L10 OR L11 OR L12 OR L13 OR L14 OR L15)) AND L1  
SEL RN

FILE 'REGISTRY' ENTERED AT 14:57:29 ON 22 AUG 2008  
L17 45 SEA (115-77-5/B1 OR 50-70-4/B1 OR 77-99-6/B1 OR 10097-02-  
L18 4 SEA L17 AND PMS/CI  
L19 40 SEA L17 AND C H O/ELF  
L20 24 SEA L17 AND (?DIOL OR ?TRIOL OR ?TETROL OR ?TETRAOL OR  
?GLYCOL OR ?ITOL OR ?CEROL)/CNS  
L21 16 SEA L19 NOT L20  
ACT POLYOLS/A  
-----  
L22 ( 16)SEA (GLYCEROL OR DIGLYCEROL OR TRIGLYCEROL OR TETRAGLYCER-  
OL OR PENTAGLYCEROL OR HEXAGLYCEROL OR TRIMETHYLOL METHANE  
OR TRIMETHYLOLETHANE OR TRIMETHYLOLPROPANE OR PENTAERYTH-  
RITOL OR DIPENTAERYTHRITOL OR TRIPENTAERYTHRITOL OR

SORBITOL OR INOSITOL) /CN  
L23 ( 1) SEA 7426-71-3  
L24 17 SEA L23 OR L22  
-----  
L25 33 SEA L20 OR L24  
L26 29 SEA L25 NOT L18  
L27 17 SEA L17 AND ACID#  
L28 15 SEA L27 AND C H O/ELF  
L29 15 SEA L28 NOT L18  
L30 9 SEA L29 NOT ANHYDRIDE#  
L31 7 SEA L30 NOT L26

FILE 'HCA' ENTERED AT 15:10:57 ON 22 AUG 2008  
L32 430 SEA (L26/D OR L26/DP) (L) (ALKOXYLAT? OR ETHOXYLAT? OR  
PROPOXYLAT?)  
L33 137 SEA (L31/D OR L31/DP) (L) (ALKOXYLAT? OR ETHOXYLAT? OR  
PROPOXYLAT?)  
L34 9 SEA L32 AND L1  
L35 4 SEA L32 AND L2  
L36 1 SEA L33 AND L1  
L37 0 SEA L33 AND L2  
L38 141447 SEA L26  
L39 43883 SEA L31  
L40 3893 SEA L38 AND L39  
L41 40 SEA L40 AND L1  
L42 36 SEA L40 AND L2

FILE 'REGISTRY' ENTERED AT 15:13:15 ON 22 AUG 2008  
E ETHYLENE OXIDE/CN  
L43 1 SEA "ETHYLENE OXIDE"/CN  
E PROPYLENE OXIDE/CN  
L44 1 SEA "PROPYLENE OXIDE"/CN

FILE 'HCA' ENTERED AT 15:13:43 ON 22 AUG 2008  
L45 30876 SEA L43 OR L44  
L46 59446 SEA ALKOXYLAT? OR ETHOXYLAT? OR PROPOXYLAT?  
L47 10 SEA L41 AND (L45 OR L46)  
L48 4 SEA L42 AND (L45 OR L46)  
L49 7 SEA (L3 OR L4) AND L38  
L50 2 SEA (L3 OR L4) AND L39  
L51 31 SEA (L3 OR L4) AND ACID#  
L52 89127 SEA POLYOL# OR POLYHYDRIC? OR POLYALCOHOL## OR POLYALC#  
OR POLYGLYCOL#  
L53 10 SEA (L3 OR L4) AND L52  
L54 7 SEA L51 AND L53

FILE 'REGISTRY' ENTERED AT 15:18:25 ON 22 AUG 2008

SEL L26 1-29 RN  
EDIT E1-E29 /BI /CRN  
L55 62957 SEA (115-77-5/CRN OR 126-30-7/CRN OR 126-58-9/CRN OR  
D L43 RN  
L56 32082 SEA 75-21-8/CRN  
D L44 RN  
L57 22688 SEA 75-56-9/CRN  
L58 6811 SEA L55 AND (L56 OR L57)  
L59 6095 SEA L55 AND L56  
L60 6107 SEA L55 AND L57  
L61 5391 SEA L55 AND L56 AND L57  
L62 27 SEA (L59 OR L60) AND 2/NC  
L63 77 SEA L61 AND 3/NC

FILE 'HCA' ENTERED AT 15:21:10 ON 22 AUG 2008

L64 2672 SEA L62 OR L63  
L65 17 SEA L64 AND L1  
L66 25 SEA L64 AND L2  
L67 1 SEA L64 AND L3  
L68 2 SEA L64 AND L4  
L69 15 SEA (L65 OR L66) AND L46  
L70 9 SEA (L65 OR L66) AND L52  
L71 41 SEA L34 OR L35 OR L36 OR L47 OR L48 OR L49 OR L50 OR L54  
OR L67 OR L68 OR L69 OR L70  
L72 16 SEA (L65 OR L66) NOT L71  
L73 33 SEA 1840-2003/PY,PRY,AY AND L71  
L74 10 SEA 1840-2003/PY,PRY,AY AND L72  
L75 970 S L1(3A) (POLYESTER# OR POLY(A)ESTER#)  
L76 50 S L75 AND L46  
L77 91410 S DEMULS? OR OIL#(2A) (WATER# OR HOH OR H2O OR AQ# OR AQUE  
L78 331635 S PETROLEUM# OR CRUDE#(2A)OIL#  
L79 2 S L76 AND (L77 OR L78)  
L80 1 S L79 NOT (L73 OR L74)  
L81 0 S 1840-2003/PY,PRY,AY AND L80  
L82 104 S (L1 OR L2) AND (L46 OR L45) AND (L52 OR L38)  
L83 9 S L82 AND (L77 OR L78)  
L84 7 S L83 NOT (L73 OR L74)  
L85 3 S 1840-2003/PY,PRY,AY AND L84

=> FILE HCA

FILE 'HCA' ENTERED AT 15:26:15 ON 22 AUG 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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=&gt; D L73 1-33 BIB ABS HITSTR HITIND

L73 ANSWER 1 OF 33 HCA COPYRIGHT 2008 ACS on STN  
 AN 143:48172 HCA Full-text  
 TI Branched highly-functional monomers exhibiting low polymerization  
 shrinkage for dental composites  
 IN Arthur, Samuel David; Brandenburg, Charles J.  
 PA USA  
 SO U.S. Pat. Appl. Publ., 14 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

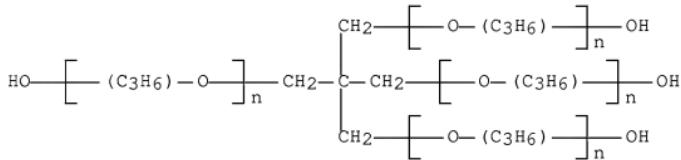
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050124722	A1	20050609	US 2004-937706	200409 08
WO	2005055960	A2	20050623	WO 2004-US40625	200412 02
WO	2005055960	A3	20080124		<--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
PRAI	US 2003-526820P	P	20031203	<--	
OS	MARPAT 143:48172				
AB	The invention relates to (i) (meth)acrylate monomers derived from polyfunctional nucleus mols.; (ii) a dental composite material wherein (meth)acrylate monomers are utilized to reduce shrinkage upon polymn.; (iii) a method for producing dental restoration articles with reduced shrinkage; and (iv) various dental restorative articles				

comprising these (meth)acrylate monomers. A dental composite material comprises about 1 to 99 wt.% of a (meth)acrylic acid ester compd., about 0.1 to 5 wt.% of a polymn. initiator, about 20 to 90 wt.% of an inorg. filler, and about 1 to 100 wt.% of a branched (meth)acrylate monomer compd. The dental composite material further comprises at least one of a photoinitiating accelerator, an activator, a pigment, a radiopaqning agent, a stabilizer, and an antioxidant. Thus, a mixt. of 7.5 g pentaerythritol propoxylate ( $n=2$ ) tetramethacrylate (PPOMA,  $n=2$ ; prepn. given) and 0.15 g phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide in 0.5 mL dichloromethane was combined to yield a PPOMA/photoinitiator masterbatch. A mixt. of 1.50 g PPOMA/photoinitiator masterbatch and 1.50 g Bis-GMA was blended with 0.50 g Degussa OX-50 fumed silica and 7.0 g Schott 8235 UF1.5 silanized glass powder and degassed. This compn. contained 28.6 wt.% resin, 4.8 wt.% fumed silica, and 66.6 wt.% glass. The resin-glass blend was molded and cured into bars for phys. testing. The use of branched, low-viscosity, high-equiv. wt. pentaerythritol propoxylate methacrylate as diluent monomer significantly reduced polymn. shrinkage by 50% relative to the TEGDMA control compn., without significantly reducing mech. properties.

IT 9051-49-4, Pentaerythritol propoxylate  
     (branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



IC ICM A61F002-00  
     ICS C07C069-74

INCL 523115000; 560001000

CC 63-7 (Pharmaceuticals)  
     Section cross-reference(s): 37

IT Contraction (mechanical)  
     (polymer.; branched highly-functional

(meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT Dental materials and appliances  
(resins; branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT Polymerization  
(shrinkage; branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT 760-93-0, Methacrylic anhydride 9051-49-4, Pentaerythritol propoxylate 42503-45-7, Pentaerythritol ethoxylate (branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

IT 79-10-7DP, Acrylic acid, esters, polymers 79-41-4DP, Methacrylic acid, esters, polymers 117223-63-9P 853053-99-3P (branched highly-functional (meth)acrylate diluent monomers with low polymn. shrinkage for dental composites)

L73 ANSWER 2 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 142:159197 HCA Full-text

TI Sorbitol esters-ethoxylated nonylphenol-polyoxyalkylene decyl ether emulsifiers for water-in-oil diesel fuel emulsions  
IN Cho, Seong Ho; Kim, Gi Seon; Kim, Jong Deuk; Lim, Dae Jae; Lim, Gyeong Sik; Song, Myeong Geun  
PA In-Chon Energy Corp., S. Korea  
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given  
CODEN: KRXXA7

DT Patent  
LA Korean  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	KR 2003020006	A	20030308	KR 2001-52257	200108 28

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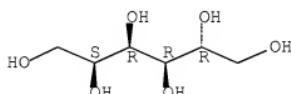
PRAI KR 2001-52257 20010828 <--  
AB Water-in-oil diesel fuel emulsions with excellent phase stability contain a dispersant-emulsifier consisting of sorbitol ester 70-85, ethoxylated nonylphenol 10-27, and ethylene oxide-propylene oxide copolymer branched decyl ether 3-10 wt.%. The sorbitol esters are selected from sorbitol palmitate, sorbitan stearate, and sorbitan trioleate.  
IT 50-70-4D, D-Glucitol, esters

(emulsifiers contg.; sorbitol esters-ethoxylated  
nonylphenol-polyoxyalkylene decyl ether emulsifiers for  
water-in-oil diesel fuel emulsions)

RN 50-70-4 HCA

CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C10L001-32

CC 51-9 (Fossil Fuels, Derivatives, and Related Products)

IT 50-70-4D, D-Glucitol, esters 1338-43-8 9016-45-9  
26266-57-9 26266-58-0 56451-84-4, Sorbitan stearate  
155683-77-5

(emulsifiers contg.; sorbitol esters-ethoxylated  
nonylphenol-polyoxyalkylene decyl ether emulsifiers for  
water-in-oil diesel fuel emulsions)

L73 ANSWER 3 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 142:24281 HCA Full-text

TI AlkoxyLATED dendrimers and their use as  
biodegradable demulsifiers

IN Leinweber, Dirk; Feustel, Michael; Wasmund, Elisabeth; Grundner,  
Heidi

PA Clariant G.m.b.H., Germany

SO Ger., 9 pp.

CODEN: GWXXAW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10329723	B3	20041202	DE 2003-10329723	200307 02
WO	2005003260	A1	20050113	WO 2004-EP6651	200406

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 CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB,  
 GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,  
 DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,  
 PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
 GW, ML, MR, NE, SN, TD, TG

EP 1646705 A1 20060419 EP 2004-740092

200406  
19

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EP 1646705 B1 20071219

R: DE, FR, GB, IT, NL  
 US 20070100002 A1 20070503 US 2005-562097

200512  
21

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NO 2006000132 A 20060109 NO 2006-132

200601  
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PRAI DE 2003-10329723 A 20030702 <--  
 WO 2004-EP6651 W 20040619

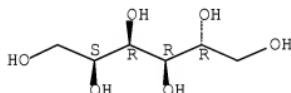
AB Use of alkoxylated dendrimers with a mol. wt. from 2400 to 100,000 g/mol, which are alkoxylated with C2-4-alkylene oxide groups or a mixt. of such alkylene oxide groups, so that the alkoxylated dendrimer contains a degree of alkoxylation of 1-100 alkylene oxide units per free OH group, for the sepn. of oil/water emulsions, in quantities of 0.0001-5 wt.%, related to the oil content of the emulsion which can be sepd.

IT 50-70-4, Sorbitol, uses 50-70-4D, Sorbitol, polyglycidyl ethers 56-81-5, Glycerol, uses 69-65-8, Mannitol 77-85-0, Trimethylolethane 77-99-6, Trimethylol propane 77-99-6D, Trimethylol propane, alkoxylated 88-99-3, Phthalic acid, uses 99-10-5, 3,5-Dihydroxybenzoic acid 110-16-7, 2-Butenedioic acid (2Z)-, uses 115-77-5, uses 115-77-5D, alkoxylated 124-04-9, Adipic acid, uses 126-30-7, Neopentylglycol 126-58-9 2224-15-9 2425-79-8, Butane-1,4-diol diglycidyl

ether 2831-90-5 3126-63-4 3454-29-3,  
Trimethylolpropanetriglycidyl ether 4767-03-7  
10097-02-6 10097-03-7 13236-02-7  
16096-31-4, Hexane-1,6-dioldiglycidyl ether  
23235-61-2, Bis(trimethylolpropane) 27043-36-3  
34541-79-2 56090-54-1, Triglycerol  
59113-36-9, Diglycerin  
(alkoxylated dendrimers as biodegradable  
demulsifiers)

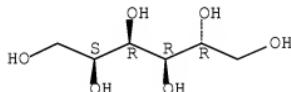
RN 50-70-4 HCA  
CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.

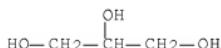


RN 50-70-4 HCA  
CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



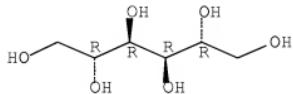
RN 56-81-5 HCA  
CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 69-65-8 HCA

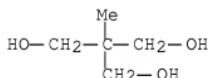
CN D-Mannitol (CA INDEX NAME)

Absolute stereochemistry.



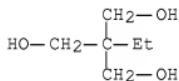
RN 77-85-0 HCA

CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



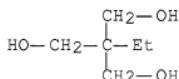
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



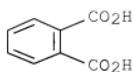
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)

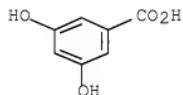


RN 88-99-3 HCA

CN 1,2-Benzenedicarboxylic acid (CA INDEX NAME)

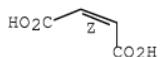


RN 99-10-5 HCA  
CN Benzoic acid, 3,5-dihydroxy- (CA INDEX NAME)

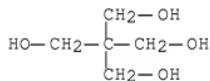


RN 110-16-7 HCA  
CN 2-Butenedioic acid (2Z)- (CA INDEX NAME)

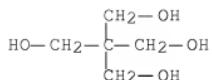
Double bond geometry as shown.



RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



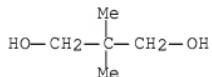
RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



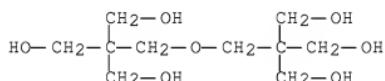
RN 124-04-9 HCA  
 CN Hexanedioic acid (CA INDEX NAME)



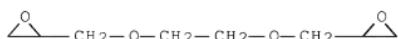
RN 126-30-7 HCA  
 CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



RN 126-58-9 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



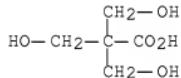
RN 2224-15-9 HCA  
 CN Oxirane, 2,2'-[1,2-ethanediylbis(oxymethylene)]bis- (CA INDEX NAME)



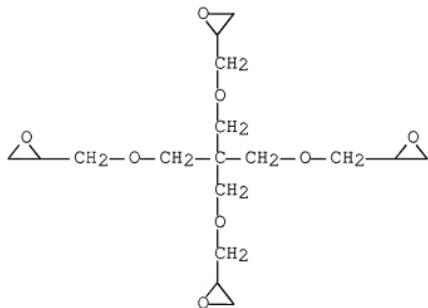
RN 2425-79-8 HCA  
CN Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis- (CA INDEX NAME)



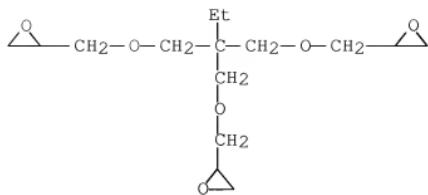
RN 2831-90-5 HCA  
CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



RN 3126-63-4 HCA  
CN Oxirane, 2,2'-[{2,2-bis[(2-oxiranylmethoxy)methyl]-1,3-propanediyl}bis(oxymethylene)]bis- (CA INDEX NAME)

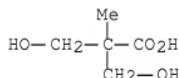


RN 3454-29-3 HCA  
CN Oxirane, 2,2'-[{2-ethyl-2-[{(2-oxiranylmethoxy)methyl]-1,3-propanediyl}bis(oxymethylene)}bis- (CA INDEX NAME)



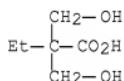
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



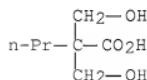
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



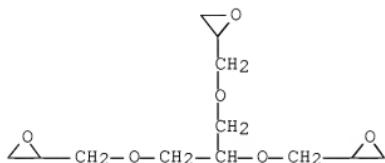
RN 10097-03-7 HCA

CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



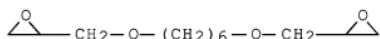
RN 13236-02-7 HCA

CN Oxirane, 2,2',2'''-[1,2,3-propanetriyltris(oxymethylene)]tris- (CA INDEX NAME)



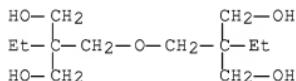
RN 16096-31-4 HCA

CN Oxirane, 2,2'-[1,6-hexanediylyl]bis(oxymethylene)]bis- (CA INDEX NAME)



RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



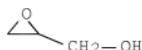
RN 27043-36-3 HCA

CN Propanol, 1,3(or 2,3)-bis(2-oxiranylmethoxy)- (CA INDEX NAME)

CM 1

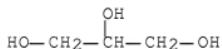
CRN 556-52-5

CMF C3 H6 O2

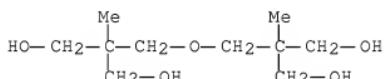


CM 2

CRN 56-81-5  
CMF C3 H8 O3



RN 34541-79-2 HCA  
CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



RN 56090-54-1 HCA  
CN Triglycerol (CA INDEX NAME)  
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
RN 59113-36-9 HCA  
CN Propanediol, oxybis- (CA INDEX NAME)  
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
IC ICM B01D017-05  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 51  
ST alkoxyLATED dendrimer biodegradable demulsifier  
petroleum prodn  
IT Petroleum, preparation  
(alkoxyLATED dendrimers as biodegradable  
demulsifiers)  
IT Polyesters, uses  
(alkoxyLATED dendrimers as biodegradable  
demulsifiers)  
IT Dendritic polymers  
(alkoxyLATED; alkoxyLATED dendrimers

as biodegradable demulsifiers)  
IT Petroleum refining  
(emulsion breaking, agents; alkoxylated  
dendrimers as biodegradable demulsifiers)  
IT Soybean oil  
(epoxidized; alkoxylated dendrimers as  
biodegradable demulsifiers)  
IT Dendritic polymers  
(reaction products; alkoxylated dendrimers as  
biodegradable demulsifiers)  
IT Castor oil  
(triglycidyl ethers; alkoxylated dendrimers  
as biodegradable demulsifiers)  
IT 50-70-4, Sorbitol, uses 50-70-4D, Sorbitol,  
polyglycidyl ethers 56-81-5, Glycerol, uses  
69-65-8, Mannitol 77-85-0, Trimethylolethane  
77-99-6, Trimethylol propane 77-99-6D, Trimethylol  
propane, alkoxylated 78-62-6, Diethoxydimethylsilane  
85-44-9, Phthalic anhydride 88-99-3, Phthalic acid, uses  
89-32-7, Pyromellitic anhydride 99-10-5,  
3,5-Dihydroxybenzoic acid 101-68-8, Diphenylmethanediisocyanate  
101-90-6 108-30-5, Succinic anhydride, uses 108-31-6, Maleic  
anhydride, uses 110-16-7, 2-Butenedioic acid (2Z)-, uses  
115-77-5, uses 115-77-5D, alkoxylated  
124-04-9, Adipic acid, uses 126-30-7,  
Neopentylglycol 126-58-9 552-30-7, Trimellitic anhydride  
1112-39-6, Dimethoxydimethylsilane 1675-54-3 2224-15-9  
2425-79-8, Butane-1,4-diol diglycidyl ether 2561-85-5,  
Dodecylsuccinic anhydride 2831-90-5 3126-63-4  
3454-29-3, Trimethylolpropanetriglycidyl ether  
4767-03-7 10097-02-6 10097-03-7  
13236-02-7 16096-31-4, Hexane-1,6-dioldiglycidyl  
ether 23235-61-2, Bis(trimethylolpropane) 25618-55-7,  
Polyglycerol 26142-30-3 26471-62-5 27043-36-3  
28109-53-7D, [1,1'-Biphenyl]-ar,ar'-diamine, tetraglycidyl ether  
34541-79-2 37237-76-6 56090-54-1, Triglycerol  
59113-36-9, Diglycerin 67938-13-0 121630-71-5  
(alkoxylated dendrimers as biodegradable  
demulsifiers)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 4 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 140:344912 HCA Full-text

TI Implantation of encapsulated biological materials for treating  
diseases such as diabetes.

IN Scharp, David; Latta, Paul; Yu, Xiaojie; Yue, Chengyun; Hubbell,

Jeffery  
PA Novocell, Inc., USA  
SO PCT Int. Appl., 96 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004032881	A2	20040422	WO 2003-US32842	200310 14
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	WO 2004032881	A3	20040902		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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	AU 2003285887	A1	20040504	AU 2003-285887	200310 14
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	US 20040136971	A1	20040715	US 2003-684859	200310 14
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	EP 1553893	A2	20050720	EP 2003-779114	200310 14
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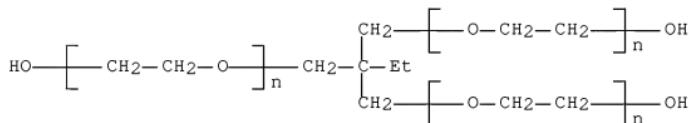
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CN 1703175	A	20051130	CN 2003-80101267	200310 14
JP 2006503080	T	20060126	JP 2004-543792	200310 14
MX 2005PA03829	A	20051005	MX 2005-PA3829	200504 11
ZA 2005003534	A	20060830	ZA 2005-3534	200505 04
IN 2005KN00857	A	20080215	IN 2005-KN857	200505 11
PRAI US 2002-419015P	P	20021011	<--	
US 2003-684859	A	20031014	<--	
WO 2003-US32842	W	20031014	<--	

AB The present invention relates to compns. for treating a disease, such as diabetes, by implanting encapsulated biol. material into a patient in need of treatment. Several methods are presented for coating several different types of biol. materials. The coatings can be placed directly onto the surface of the biol. materials or onto the surface of other coating materials that hold the biol. materials. The components of the polymn. reactions that produce the coatings can include natural and synthetic polymers, macromers, accelerants, cocatalysts, photoinitiators, and radiation. These encapsulated biol. materials are used to treat a variety of different human and animal diseases or disorders by implanting them into several areas in the body including the s.c. site. The coating materials can be manipulated to provide different degrees of biocompatibility, protein diffusivity characteristics, strength, and biodegradability to optimize the delivery of biol. materials from the encapsulated implant to the host recipient while protecting the encapsulated biol. materials from destruction by the host inflammatory and immune protective mechanisms without requiring long-term anti-inflammatory or anti-immune treatment of the host. Examples are given for isolating islet cells in mice and primates and the prepn. of a dendrimer- eosin Y conjugate for coating the cells.

IT 50586-59-9, Ethoxylated trimethylolpropane  
     (implantation of encapsulated biol. materials for treating  
     diseases such as diabetes)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
     2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM A61K

CC 63-6 (Pharmaceuticals)

IT Polyamines  
     (polyamide-, dendrimers; implantation of encapsulated  
     biol. materials for treating diseases such as diabetes)

IT Dendritic polymers  
     (polyamide-polyamines; implantation of encapsulated biol.  
     materials for treating diseases such as diabetes)

IT Polyamides, biological studies  
     (polyamine-, dendrimers; implantation of encapsulated  
     biol. materials for treating diseases such as diabetes)

IT 26937-01-9DP, Pamam, conjugates with 5(6)-carboxy eosin  
     (dendritic; implantation of encapsulated biol.  
     materials for treating diseases such as diabetes)

IT 56-87-1, L-Lysine, uses 70-26-8, L-Ornithine 71-00-1,  
     L-Histidine, uses 74-79-3, L-Arginine, uses 79-10-7, Acrylic  
     acid, uses 88-12-0, uses 100-69-6, 2-Vinylpyridine 102-71-6,  
     Triethanolamine, uses 103-49-1, Dibenzylamine 103-83-3,  
     N,N-Dimethylbenzylamine 104-63-2, N-Benzylethanolamine 105-59-9,  
     N-Methyldiethanolamine 109-56-8, N-Isopropylethanolamine  
     110-18-9 121-44-8, Triethylamine, uses 141-43-5, Ethanolamine,  
     uses 818-61-1, 2-Hydroxyethyl acrylate 1072-63-5,  
     1-Vinylimidazole 2235-00-9, N-Vinylcaprolactam 7727-21-1,  
     Potassium persulfate 25322-68-3, Peg 26828-48-8,  
     2-Allyl-2-methyl-1,3-cyclopentanedione 28961-43-5,  
     Ethoxylated trimethylolpropane triacrylate  
     50586-59-9, Ethoxylated trimethylolpropane  
     680993-48-0  
         (implantation of encapsulated biol. materials for treating  
         diseases such as diabetes)

IT 132201-84-4DP, conjugates with PAMAM dendrimer  
(implantation of encapsulated biol. materials for treating  
diseases such as diabetes)

L73 ANSWER 5 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 140:254086 HCA Full-text

TI Procedure for the production hyperbranched, water-thinnable  
polyesters

IN Stumbe, Jean-Francois; Bruchmann, Bernd; Haering, Dietmar

PA BASF A.-G., Germany

SO Ger. Offen., 13 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI DE 10240817 A1 20040311 DE 2002-10240817

200208  
30

WO 2004020503 A1 20040311 WO 2003-EP8088

200307  
24

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,  
MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

AU 2003254580 A1 20040319 AU 2003-254580

200307  
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EP 1537166 A1 20050608 EP 2003-790809

200307  
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PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK  
JP 2005536608 T 20051202 JP 2004-531812

200307  
24

US 20050250914 A1 20051110 US 2005-525752 <--

200502  
25

US 7148293 B2 20061212 <--  
US 20070293634 A1 20071220 US 2007-585807

200701  
16

PRAI DE 2002-10240817 A 20020830 <--  
WO 2003-EP08088 W 20030724 <--  
US 2005-525752 A3 20050225

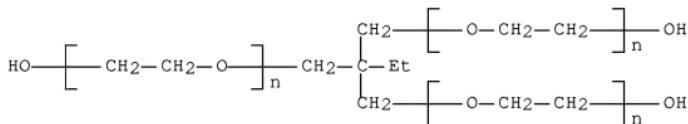
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AB Uncrosslinked, hyperbranched, water-sol. or water-dispersible polyesters, useful for inks, adhesives and coatings, are manufd. by polymn. of  $\geq 1$  dicarboxylic acid with  $\geq 1$  polyether polyol having  $\geq 3$  OH groups such as polyglycerol in the presence of catalysts at 40-160° and diacid- polyol ratio such that the mol. ratio of the OH and CO<sub>2</sub>H groups is (1-2):(1-2).

IT 50586-59-9F, Ethoxylated trimethylolpropane  
(Lupranol VP 9266; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08G063-78  
ICS C08G063-82

CC 35-5 (Chemistry of Synthetic High Polymers)

IT Dendritic polymers  
(hyperbranched; prodn. of hyperbranched, water-thinnable, uncrosslinked polyesters for polyether polyols for lacquers)

IT Polyethers, preparation  
Polyoxyalkylenes, preparation  
(polyester-, hyperbranched; prodn. of hyperbranched,  
water-thinnable, uncrosslinked polyesters for polyether  
polyols)

IT Polyesters, preparation  
(polyether-, hyperbranched; prodn. of hyperbranched,  
water-thinnable, uncrosslinked polyesters for polyether  
polyols)

IT Polyesters, preparation  
(polyoxyalkylene-, hyperbranched; prodn. of hyperbranched,  
water-thinnable, uncrosslinked polyesters for polyether  
polyols)

IT Inks  
(printing; prodn. of hyperbranched, water-thinnable,  
uncrosslinked polyesters for polyether polyols for  
printing inks)

IT Adhesives  
(prodn. of hyperbranched, water-thinnable, uncrosslinked  
polyesters for polyether polyols for adhesives)

IT Coating materials  
(prodn. of hyperbranched, water-thinnable, uncrosslinked  
polyesters for polyether polyols for coatings)

IT Lacquers  
(prodn. of hyperbranched, water-thinnable, uncrosslinked  
polyesters for polyether polyols for lacquers)

IT 50586-59-9P, Ethoxylated trimethylolpropane  
(Lupranol VP 9266; prodn. of hyperbranched, water-thinnable,  
uncrosslinked polyesters for polyether polyols)

IT 26655-24-3P, Glycerol-phthalic anhydride copolymer 27380-79-6P,  
Adipic acid-glycerol copolymer 30875-76-4P, Adipic acid-ethylene  
glycol-glycerol copolymer 173855-12-4P, Adipic acid-  
ethoxylated trimethylolpropane copolymer 188550-41-6P,  
Adipic acid-ethoxylated glycerol copolymer 669052-68-0P,  
Adipic acid-glycerol-glycerol monostearate copolymer 669052-71-5P,  
1,2-Cyclohexanedicarboxylic acid-glycerol copolymer 669053-68-3P,  
Adipic acid-glycerol copolymer stearate  
(prodn. of hyperbranched, water-thinnable, uncrosslinked  
polyesters for polyether polyols)

L73 ANSWER 6 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 139:152300 HCA Full-text

TI Stable high-voltage composite polymer electrolytes for secondary  
lithium nonaqueous-electrolyte batteries

IN Zaghbi, Karim; Perrier, Michel; Guerfi, Abdelbast; Dupuis,  
Elisabeth; Charest, Patrick; Allaire, Francois; Armand, Michel  
PA Hydro-Quebec, Can.

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003063287	A2	20030731	WO 2003-CA52	200301 15
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	WO 2003063287	A3	20031204		
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2367290	A1	20030716	CA 2002-2367290	200201 16
				<--	
	CA 2471395	A1	20030731	CA 2003-2471395	200301 15
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	EP 1466379	A2	20041013	EP 2003-700260	200301 15
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	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	JP 2006501600	T	20060112	JP 2003-563038	200301 15
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	US 20050234177	A1	20051020	US 2005-501844	200506 10
				<--	

PRAI CA 2002-2367290

A 20020116 <--

WO 2003-CA52

W 20030115 <--

AB A composite polymer electrolyte for an electrochem. generator (esp. a secondary lithium battery) consists of: (1) a star- branched polymer with four branches contg. terminating (meth)acrylate, Cl-8-alkoxy, and vinyl groups, (2) polyvinylidene difluoride (mol. wt. 100,000-250,000), (3) vinylidene difluoride-hexafluoropropene copolymer (mol. wt. 100,000-250,000), (4) PTFE (mol. wt. 200,000), (5) ethylene-propylene-5-methylene-2-norbornene copolymer or EPDM rubber, (6) polyvinyl alc. or a substituted polyvinyl alc., (7) poly(C2-3-alkoxylated) glycerol or trimethylolpropane, crosslinked and isocyanate-terminated, (8) poly(Me methacrylate) (mol. wt. 50,000-500,000), (9) polyacrylonitrile (mol. wt. 20,000-200,000), (10) SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub>, and (11) TiO<sub>2</sub> nanoparticles, optionally coated with an org. material. The composite polymer electrolyte, which can be crosslinked (e.g., by radical initiators), also contains assocd. conducting salts, esp. lithium salts, and org. solvents, esp. carbonates, lactones, and tetra-Et sulfamide. A suitable anode for use with this composite electrolyte is preferably Al-Li alloy, Li<sub>4</sub>.4Sn<sub>22</sub>, Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub>; suitable cathodes are LiCoPo<sub>4</sub> or Li(Mn<sub>0.66</sub>Ni<sub>0.34</sub>)O<sub>2</sub>.

IT 56-81-5D, Glycerol, poly(C2-3-alkoxylated)

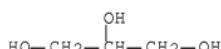
derivs., isocyanate-terminated 77-99-6D,

Trimethylolpropane, poly(C2-3-alkoxylated) derivs., isocyanate-terminated

(composite polyelectrolyte contg.; stable high-voltage composite polymer electrolytes for secondary lithium nonaq.-electrolyte batteries)

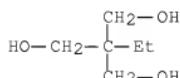
RN 56-81-5 HCA

CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



IC ICM H01M010-40  
ICS H01G009-02; C08F290-06; C08G065-329  
CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)  
Section cross-reference(s): 38  
ST high voltage stable polymer battery electrolyte composite;  
star branched polymer battery  
electrolyte composite; EPDM rubber polymer battery electrolyte  
composite; nonaq battery electrolyte composite polymer  
IT Acrylic polymers, uses  
Polymers, uses  
(star-branched; stable high-voltage composite  
polymer electrolytes for secondary lithium nonaq.-electrolyte  
batteries)  
IT 56-81-5D, Glycerol, poly(C2-3-alkoxylated)  
derivs., isocyanate-terminated 77-99-6D,  
Trimethylolpropane, poly(C2-3-alkoxylated) derivs.,  
isocyanate-terminated 1344-28-1, Alumina, uses 7631-86-9,  
Silica, uses 9002-84-0, PTFE 9002-89-5, Polyvinyl alcohol  
9002-89-5D, Polyvinyl alcohol, O-derivs. 9011-14-7, Polymethyl  
methacrylate 9011-17-0 24937-79-9, Polyvinylidene difluoride  
25014-41-9, Polyacrylonitrile 25034-77-9 570375-13-2, Elexcel MP  
210-1  
(composite polyelectrolyte contg.; stable high-voltage composite  
polymer electrolytes for secondary lithium nonaq.-electrolyte  
batteries)

L73 ANSWER 7 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 139:150100 HCA Full-text

TI Chain extended dendritic polyether

IN Haeggman, Bo; James, David; Bjoernberg, Hakan; Midelf, Birger

PA Perstorp Specialty Chemicals Ab, Swed.

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003062306	A1	20030731	WO 2003-SE117	200301 22
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W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,				

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
 NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,  
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,  
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 SN, TD, TG

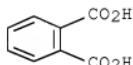
SE 2002000207	A	20030726	SE 2002-207	200201 25
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SE 524461	C2	20040810		
EP 1468040	A1	20041020	EP 2003-731877	200301 22
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005515283	T	20050526	JP 2003-562180	200301 22
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CN 1622968	A	20050601	CN 2003-802699	200301 22
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US 20050131205	A1	20050616	US 2004-501024	200409 14
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US 7091308                    B2     20060815  
 PRAI SE 2002-207            A     20020125    <--  
 WO 2003-SE117              W     20030122    <--

AB A dendritic polyether with narrow mol. wt. comprises a dendritic core polymer and a chain extension bonded to said core polymer, which is at least partially chain terminated and/or partially functionalized. The core polymer is a polyhydric dendritic polyether and the chain extension is obtained by addn. of at least one alkylene oxide to at least one hydroxyl group in said core polymer at mol ratio of core polymer to alkylene oxide of 1:(1-100). A typical chain-extended dendritic polyether was manufd by reacting 28.55 g 3-ethyl-3-(hydroxymethyl)oxetane 4 h with 7.28 g PP50 (ethoxylated pentaerythritol) at 110°, adding 357 g KOH (as an aq. soln.) to 35.5 kg resulting 2nd generation dendritic polyether, heating 1 h at 80°,

removing the water by vacuum and increasing the temp. to 110°, adding 28.8 g ethylene oxide under pressure and N in 1.5 h at 110-120°, and heating 3 h at 110°.

IT 88-99-3DP, Phthalic acid, esters with polyethers with dendritic initiators 124-04-9DP, Adipic acid, esters with polyethers with dendritic initiators (functionalized polyoxyalkylenes with dendritic initiators)  
RN 88-99-3 HCA  
CN 1,2-Benzenedicarboxylic acid (CA INDEX NAME)

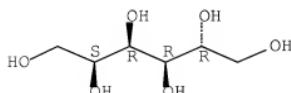


RN 124-04-9 HCA  
CN Hexanedioic acid (CA INDEX NAME)

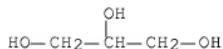


IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol, reactions 69-65-8, Mannitol 77-85-0, Trimethylolethane 77-99-6, Trimethylolpropane 126-30-7, Neopentyl glycol 126-58-9, Dipentaerythritol 23235-61-2, Ditrimethylolpropane 34541-79-2, Ditrimethylolethane 59113-36-9, Diglycerol (initiator precursor; polyoxyalkylenes with dendritic initiators)  
RN 50-70-4 HCA  
CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.

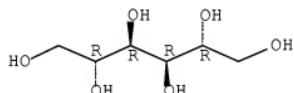


RN 56-81-5 HCA  
CN 1,2,3-Propanetriol (CA INDEX NAME)

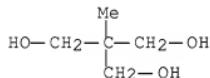


RN 69-65-8 HCA  
CN D-Mannitol (CA INDEX NAME)

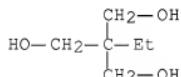
Absolute stereochemistry.



RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)

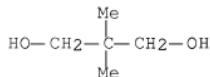


RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



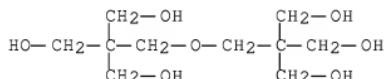
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



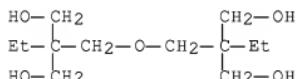
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



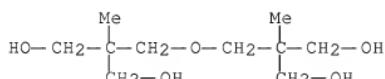
RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



RN 59113-36-9 HCA

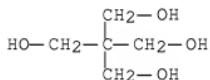
CN Propanediol, oxybis- (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 115-77-5D, Pentaerythritol, tall-oil fatty acid alkyd resins  
(sunflower-oil-fatty acid esters of polyoxyalkylenes with  
dendritic initiators for dispersants in alkyd and acrylic  
emulsion paints)

RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



IC ICM C08G083-00

CC 35-7 (Chemistry of Synthetic High Polymers)

ST dendritic polymer initiated polyoxyalkylene manuf;  
pentaerythritol polyoxyethylene ethylhydroxymethyloxetane manuf

IT Coating materials  
(UV-curable; acrylates of reaction products of  
ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol  
adducts for UV-curable, flexible waterproof coatings)

IT Ethers, preparation  
(allyl, reaction products, with polyethers with dendritic  
initiators; functionalized polyoxyalkylenes with  
dendritic initiators)

IT Acrylic polymers, uses  
(coating binder; sunflower-oil-fatty acid esters of  
polyoxyalkylenes with dendritic initiators for  
dispersants in alkyd and acrylic emulsion paints)

IT Fatty acids, preparation  
(dehydrated castor-oil, esters, with polyethers with  
dendritic initiators; functionalized polyoxyalkylenes  
with dendritic initiators)

IT Paints  
(emulsions; sunflower-oil-fatty acid esters of polyoxyalkylenes  
with dendritic initiators for dispersants in alkyd and  
acrylic emulsion paints)

IT Vinyl compounds, uses  
(ester group-contg., polymers; polyoxyalkylenes with  
dendritic initiators for toughening agents in vinyl ester  
polymers)

IT Sulfonic acids, preparation  
(esters, with polyethers with dendritic initiators;  
functionalized polyoxyalkylenes with dendritic

- initiators)
- IT Coating materials
  - (flexible; acrylates of reaction products of ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts for UV-curable, flexible waterproof coatings)
- IT Ethers, preparation
  - (glycidyl, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Dendritic polymers
  - (hyperbranched, initiators; polyoxyalkylenes with dendritic initiators)
- IT Fatty acids, preparation
  - (linseed-oil, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Emulsions
  - (paints; sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)
- IT Polyoxyalkylenes, preparation
  - (polyoxyalkylenes with dendritic initiators)
- IT Concrete
  - (polyoxyalkylenes with dendritic initiators for concrete additives)
- IT Adhesives
  - (polyoxyalkylenes with dendritic initiators for prepn. of adhesives)
- IT Polyamides, uses
  - (polyoxyalkylenes with dendritic initiators for processing aid for polyamides)
- IT Polycarbonates, uses
  - (polyoxyalkylenes with dendritic initiators for processing aid for polycarbonates)
- IT Polyesters, uses
  - (polyoxyalkylenes with dendritic initiators for processing aid for polyesters)
- IT Polyimides, uses
  - (polyoxyalkylenes with dendritic initiators for processing aid for polyimides)
- IT Polyolefins
  - (polyoxyalkylenes with dendritic initiators for processing aid for polyolefins)
- IT Polycyanurates
  - (polyoxyalkylenes with dendritic initiators for toughening agents in cyanate ester polymers)
- IT Aminoplasts

- (polyoxyalkylenes with dendritic initiators for toughening agents in melamine resins)
- IT Phenolic resins, uses
  - (polyoxyalkylenes with dendritic initiators for toughening agents in phenolic resins)
- IT Polyurethanes, uses
  - (polyoxyalkylenes with dendritic initiators for toughening agents in polyurethanes)
- IT Aminoplasts
  - (polyoxyalkylenes with dendritic initiators for toughening agents in urea resins)
- IT Inks
  - (printing; polyoxyalkylenes with dendritic initiators for printing ink additives)
- IT Polyoxyalkylenes, preparation
  - (reaction products with dendritic initiators; polyoxyalkylenes with dendritic initiators)
- IT Polyoxyalkylenes, preparation
  - (reaction products with ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts; polyoxyalkylenes with dendritic initiators)
- IT Acid halides
- Anhydrides
- Isocyanates
- Thiols, preparation
  - (reaction products, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Carboxylic acids, preparation
  - (reaction products, with polyethers with dendritic initiators; polyoxyalkylenes with dendritic initiators)
- IT Fatty acids, preparation
  - (safflower-oil, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Fatty acids, preparation
  - (soya, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Fatty acids, preparation
  - (sunflower-oil, esters, with dendritic polyol-initiated polyethylene glycol; functionalized polyoxyalkylenes with dendritic initiators for dispersants for pigments and alkyd resin emulsion coatings)
- IT Dispersing agents
  - (sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic

- emulsion paints)
- IT Alkyd resins
  - (sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)
- IT Fatty acids, uses
  - (tall-oil; sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)
- IT Fatty acids, preparation
  - (tung-oil, esters, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Polyesters, uses
  - (unsatd.; polyoxyalkylenes with dendritic initiators for toughening agents in unsatd. polyesters)
- IT Ethers, preparation
  - (vinyl, reaction products, with polyethers with dendritic initiators; functionalized polyoxyalkylenes with dendritic initiators)
- IT Coating materials
  - (water-resistant; acrylates of reaction products of ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts for UV-curable, flexible waterproof coatings)
- IT 570412-92-9, Mowilith LDM 7451
  - (coating binder; sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)
- IT 51728-26-8, Ebecryl 40
  - (crosslinker; acrylates of reaction products of ethyl(hydroxymethyl)oxetane-ethoxylated pentaerythritol adducts for UV-curable, flexible waterproof coatings)
- IT 57-10-3DP, Palmitic acid, reaction products with polyoxyalkylenes with dendritic initiators 57-11-4DP, Stearic acid, reaction products with polyoxyalkylenes with dendritic initiators 60-33-3DP, Linoleic acid, reaction products with polyoxyalkylenes with dendritic initiators 64-19-7DP, Acetic acid, reaction products with polyoxyalkylenes with dendritic initiators 65-85-0DP, Benzoic acid, reaction products with polyoxyalkylenes with dendritic initiators 75-98-9DP, Trimethylacetic acid, reaction products with polyoxyalkylenes with dendritic initiators 79-09-4DP, Propionic acid, reaction products with polyoxyalkylenes with dendritic initiators 79-31-2DP, Isobutyric acid, reaction products with polyoxyalkylenes with dendritic initiators 79-41-4DP, Methacrylic acid, reaction products with polyethers with dendritic initiators 88-99-3DP, Phthalic acid,

esters with polyethers with dendritic initiators  
98-73-7DP, p-tert-Butylbenzoic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 100-21-0DP,  
Terephthalic acid, esters with polyethers with dendritic  
initiators 106-89-8DP, Epichlorohydrin, reaction products with  
polyethers with dendritic initiators 106-95-6DP, Allyl  
bromide, reaction products with polyethers with dendritic  
initiators 107-05-1DP, Allyl chloride, reaction products with  
polyethers with dendritic initiators 107-92-6DP, Butyric  
acid, reaction products with polyoxyalkylenes with dendritic  
initiators 109-52-4DP, Valeric acid, reaction products with  
polyoxyalkylenes with dendritic initiators 110-44-1DP,  
Sorbic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 111-14-8DP, Heptanoic acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
112-05-0DP, Nonanoic acid, reaction products with polyoxyalkylenes  
with dendritic initiators 112-80-1DP, Oleic acid,  
reaction products with polyoxyalkylenes with dendritic  
initiators 112-85-6DP, Behenic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 112-86-7DP,  
Erucic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 121-91-5DP, Isophthalic acid, esters  
with polyethers with dendritic initiators 123-99-9DP,  
Azelaic acid, esters with polyethers with dendritic  
initiators 124-04-9DP, Adipic acid, esters with polyethers  
with dendritic initiators 124-07-2DP, Caprylic acid,  
reaction products with polyoxyalkylenes with dendritic  
initiators 141-22-0DP, Ricinoleic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 142-62-1DP,  
Caproic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 143-07-7DP, Lauric acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
149-57-5DP, 2-Ethylhexanoic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 334-48-5DP,  
Capric acid, reaction products with polyoxyalkylenes with  
dendritic initiators 463-40-1DP, Linolenic acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
503-64-0DP, Isocrotonic acid, reaction products with  
polyoxyalkylenes with dendritic initiators 506-46-7DP,  
Cerotic acid, reaction products with polyoxyalkylenes with  
dendritic initiators 506-48-9DP, Montanic acid, reaction  
products with polyoxyalkylenes with dendritic initiators  
514-10-3DP, Abietic acid, reaction products with polyoxyalkylenes  
with dendritic initiators 528-44-9DP, Trimellitic acid,  
esters with polyethers with dendritic initiators  
544-63-8DP, Myristic acid, reaction products with polyoxyalkylenes  
with dendritic initiators 557-59-5DP, Lignoceric acid,

reaction products with polyoxyalkylenes with dendritic initiators 3132-64-7DP, Epibromohydrin, reaction products with polyethers with dendritic initiators 3724-65-0P, Crotonic acid 7664-38-2DP, Phosphoric acid, esters with polyethers with dendritic initiators 26896-18-4DP, Isononanoic acid, reaction products with polyoxyalkylenes with dendritic initiators 30399-84-9DP, Isostearic acid, reaction products with polyoxyalkylenes with dendritic initiators  
     (functionalized polyoxyalkylenes with dendritic initiators)

IT 630105-35-0P  
     (functionalized polyoxyalkylenes with dendritic initiators)

IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol, reactions 69-65-0, Mannitol 77-84-9, 2-Methyl-2-ethyl-1,3-propanediol 77-85-0, Trimethylolethane 77-99-6, Trimethylolpropane 110-63-4, 1,4-Butanediol, reactions 111-29-5, 1,5-Pantanediol 115-84-4, 2-Ethyl-2-butyl-1,3-propanediol 126-30-7, Neopentyl glycol 126-58-9, Dipentaerythritol 629-11-8, 1,6-Hexanediol 2163-42-0, 2-Methyl-1,3-propanediol 2658-60-8, 1,1-Cyclohexanedimethanol 2754-18-9, 3,3-Bis(hydroxymethyl)oxetane 3143-02-0, 3-Methyl-3-(hydroxymethyl)oxetane 3971-29-7, 1,2-Cyclohexanedimethanol 4744-47-2, Anhydroenneaheptitol 6228-25-7, 5,5-Bis(hydroxymethyl)-1,3-dioxane 23235-61-2, D trimethylolpropane 34541-79-2, D trimethylolethane 59113-36-9, Diglycerol  
     (initiator precursor; polyoxyalkylenes with dendritic initiators)

IT 42503-45-7DP, PP50, reaction products with ethyl(hydroxymethyl)oxetane 630104-57-3P  
     (initiator; polyoxyalkylenes with dendritic initiators)

IT 25189-69-9DP, Phenylloxirane polymer, reaction products with dendritic initiators 25322-69-4DP, Polypropylene glycol, reaction products with dendritic initiators 25702-20-9DP, Cyclohexene oxide homopolymer, reaction products with dendritic initiators 26100-60-7DP, 1,3-Epoxybutane homopolymer, reaction products with dendritic initiators 26703-03-7DP, Polybutadiene monoxide, reaction products with dendritic initiators  
     (polyoxyalkylenes with dendritic initiators)

IT 76397-91-6, Bisphenol A-epichlorohydrin-Aradur HY 917 copolymer  
     (polyoxyalkylenes with dendritic initiators as tougheners for epoxy resins)

IT 9003-08-1  
     (polyoxyalkylenes with dendritic initiators for toughening agents in melamine resins)

IT 9011-05-6  
(polyoxyalkylenes with dendritic initiators for toughening agents in urea resins)  
IT 13463-67-7, Titania, processes 461426-90-4, Kronos 2310  
(sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants for pigments in acrylic emulsion paints)  
IT 115-77-5E, Pentaerythritol, tall-oil fatty acid alkyd resins  
(sunflower-oil-fatty acid esters of polyoxyalkylenes with dendritic initiators for dispersants in alkyd and acrylic emulsion paints)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 8 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 138:28948 HCA Full-text

TI Cosmetic composition forming after application of a supramolecular polymer

IN Mougin, Nathalie; Livoreil, Aude; Mondet, Jean  
L'oreal, Fr.

SO PCT Int. Appl., 82 pp.  
CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2002098377 A1 20021212 WO 2002-FR1966 200206  
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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,  
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SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG

FR 2825628 A1 20021213 FR 2001-7476 200106  
07

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FR 2825628 B1 20040319

AU 2002317916	A1	20021216	AU 2002-317916	
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EP 1392222	A1	20040303	EP 2002-747520	
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AT 372110	T	20070915	AT 2002-747520	
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ES 2292780	T3	20080316	ES 2002-747520	
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US 20040161394	A1	20040819	US 2003-479716	
				200312 05
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PRAI FR 2001-7476            A     20010607    <--  
                                   W     20020607    <--

AB    The invention concerns a cosmetic compn. for care and/or treatment and/or make-up of keratinous materials, comprising, in a physiol. acceptable medium, an efficient amt. of at least a linear, branched or cyclic, or dendritic polymer, comprising: a polymeric skeleton including at least two repeat units, and at least two functional groups (A) fixed on the polymeric skeleton and capable of binding with one or several partner junction groups, of identical or different chem. type, each matching of two functional groups involving at least three H bridges. Prepn. of a ureido pyrimidone polydimethylsiloxane and a lipstick contg. this polymer is disclosed.

IT    9082-00-2DP, reaction products with IPDI and  
4-methyllisocytosine

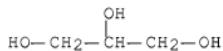
(cosmetic compn. forming after application of supramol. polymer)

RN    9082-00-2 HCA

CN    Oxirane, 2-methyl-, polymer with oxirane, ether with  
1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5  
CMF C3 H8 O3



CM 2

CRN 9003-11-6  
CMF (C3 H6 O . C2 H4 O)x  
CCI PMS

CM 3

CRN 75-56-9  
CMF C3 H6 O



CM 4

CRN 75-21-8  
CMF C2 H4 O



IC ICM A61K007-02  
ICS A61K007-48  
CC 62-4 (Essential Oils and Cosmetics)  
IT Acrylic polymers, biological studies

Dendritic polymers  
Polycarbonates, biological studies  
Polyolefins  
Polyoxyalkylenes, biological studies  
Polyoxymethylene, biological studies  
Polysiloxanes, biological studies  
Polythioethers  
    (cosmetic compn. forming after application of supramol. polymer)  
IT 3977-29-5DP, reaction products with ethoxylated-  
propoxylated glycerol and IPDI 4098-71-9DP, IPDI, reaction  
products with ethoxylated-propoxylated glycerol  
and 4-methylisocytosine 9032-00-2DP, reaction products  
with IPDI and 4-methylisocytosine 32801-66-4P 205751-10-6P  
    (cosmetic compn. forming after application of supramol. polymer)  
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 9 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 136:386620 HCA Full-text  
TI Process for manufacture of a dendritic polyether  
IN Pettersson, Bo; James, David; Midelf, Birger; Bjoernberg, Hakan;  
Rehnberg, Nicola  
PA Perstorp Specialty Chemicals AB, Swed.  
SO PCT Int. Appl., 25 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2002040572	A1	20020523	WO 2001-SE2519	200111 12 -----
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				<--
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
SE	2000004155	A	20020515	SE 2000-4155	200011

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SE 524174	C2	20040706	AU 2002-14502	
AU 2002014502	A	20020527	AU 2002-14502	200111 12
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EP 1355975	A1	20031029	EP 2001-983047	
				200111 12
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004514037	T	20040513	JP 2002-543576	
				200111 12
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US 20040059086	A1	20040325	US 2003-416712	
				200307 07
<--				

US 7176264	B2	20070213	
PRAI SE 2000-4155	A	20001114	<--
WO 2001-SE2519	W	20011112	<--

AB A process for manuf. of a dendritic polyether with good control of mol. wt. and increased heat resistance comprising a core, derived from a compd. having two or more hydroxyl groups, and at least one branching generation being built up from at least one hydroxyoxetane having one oxetane group and at least one hydroxyl group is disclosed. The process comprises ring opening addn. to said core and ring opening polymn. of said hydroxyoxetane. A mixt. of the core compd. and at least one cationic initiator is prepnd. and said hydroxyoxetane is fed to said mixt. at a rate resulting in and/or maintaining a reaction temp. below onset at thermal degrdn. and in an amt. resulting in at least one branching generation. The initiator is present in an amt. of 0.1-0.5 % by wt. calcd. on said core and said oxetane, preferably in an amt. giving a ratio hydroxyl groups to initiator of between 1:0.01 and 1:0.05. Yielded dendritic polyether is subsequently neutralized by addn. of at least one alk. compd. and optionally purified. A typical dendritic polyether was manufd. by polymn. of 3-ethyl-3-(hydroxymethyl)oxetane in the presence of Polyol PP50 (ethoxylated pentaerythritol).

IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol, reactions 69-65-8, Mannitol 77-85-0, Trimethylolethane 77-93-6, Trimethylolpropane 115-77-5, Pentaerythritol, reactions 126-30-7, Neopentyl glycol 126-58-9, Di(pentaerythritol)

23235-61-2, Di(trimethylolpropane) 34541-79-2,

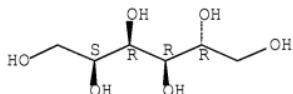
Di(trimethylolethane) 59113-36-9, Diglycerol

(core; manuf. of dendritic polyethers with polyol cores with good control of mol. wt. and increased heat resistance)

RN 50-70-4 HCA

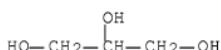
CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



RN 56-81-5 HCA

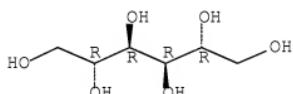
CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 69-65-8 HCA

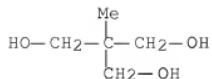
CN D-Mannitol (CA INDEX NAME)

Absolute stereochemistry.



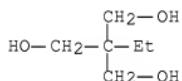
RN 77-85-0 HCA

CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



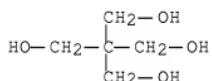
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



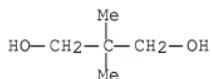
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



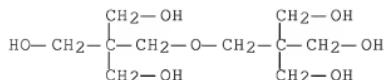
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)

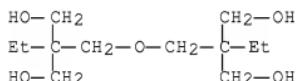


RN 126-58-9 HCA

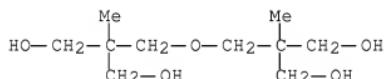
CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



RN 23235-61-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX  
 NAME)



RN 34541-79-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX  
 NAME)



RN 59113-36-9 HCA  
 CN Propanediol, oxybis- (CA INDEX NAME)  
 \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 IC ICM C08G083-00  
 ICS C08G065-18  
 CC 35-7 (Chemistry of Synthetic High Polymers)  
 ST dendritic polyoxyalkylene controlled mol wt heat resistant;  
 polyethylhydroxymethyloxetane dendritic manuf  
 ethoxylated pentaerythritol initiator  
 IT 50-70-4, Sorbitol, reactions 56-81-5, Glycerol,  
 reactions 57-55-6, Propylene glycol, reactions 69-65-8,  
 Mannitol 77-84-9, 2-Ethyl-2-methyl-1,3-propanediol 77-35-0  
 , Trimethylethane 77-99-6, Trimethylolpropane  
 107-21-1, Ethylene glycol, reactions 110-63-4, 1,4-Butanediol,  
 reactions 111-29-5, 1,5-Pentanediol 111-46-6, Diethylene glycol,  
 reactions 112-27-6, Triethylene glycol 115-77-5,

Pentaerythritol, reactions 115-84-4, 2-Butyl-2-ethyl-1,3-propanediol 126-30-7, Neopentyl glycol 126-58-9, Di(pentaerythritol) 629-11-8, 1,6-Hexanediol 2163-42-0, 2-Methyl-1,3-propanediol 2658-60-8, 1,1-Cyclohexanedimethanol 4744-47-2, Anhydroenneaheptitol 6228-25-7, 5,5-Bis(hydroxymethyl)-1,3-dioxane 23235-61-2, Di(trimethylolpropane) 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol 34541-79-2, Di(trimethylolethane) 42429-85-6, 2,2-Dihydroxy-1,3-propanediol 42503-45-7, PP50 59113-36-9, Diglycerol (core; manuf. of dendritic polyethers with polyol cores with good control of mol. wt. and increased heat resistance)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

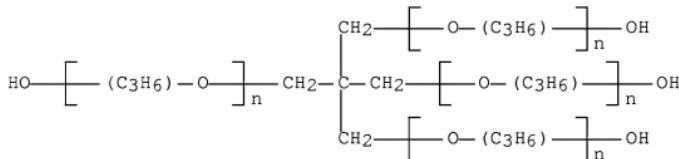
L73 ANSWER 10 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 136:321601 HCA Full-text  
TI Pentaerythritol propoxylate: a new crystallization agent and cryoprotectant induces crystal growth of 2-methylcitrate dehydratase  
AU Gulick, Andrew M.; Horswill, Alexander R.; Thoden, James B.; Escalante-Semerena, Jorge C.; Rayment, Ivan  
CS Department of Biochemistry, University of Wisconsin, Madison, WI, 53706, USA  
SO Acta Crystallographica, Section D: Biological Crystallography (2002), D58(2), 306-309  
CODEN: ABCRE6; ISSN: 0907-4449  
PB Blackwell Munksgaard  
DT Journal  
LA English  
AB In the search for macromol. crystn. conditions, the precipitant is probably the most important variable, such that when problematic crystals are encountered there is always the question of whether an alternative precipitant might resolve the problem. During an effort to obtain high-quality crystals of several problematic proteins, 2 new agents, pentaerythritol propoxylate and pentaerythritol ethoxylate, yielded well-ordered quality crystals where more traditional precipitants were unsuccessful. Pentaerythritol propoxylate and pentaerythritol ethoxylate contain a pentaerythritol backbone to which org. polymers are bound, forming a branched polymer. As such, they are larger than small org. precipitants such as low mol.-wt. alcs. or 2-methyl-2,4-pentanediol, but behave differently than polyethylene glycols. Here, these compds. were used to crystallize 2-methylcitrate dehydratase encoded by the *Salmonella enterica* prpD gene that catalyzes the dehydration of 2-methylcitrate to form 2-methyl-cis-aconitate. Whereas the PrpD protein has

previously crystd. readily under a no. of conditions, the resultant crystals were found to be unsuitable for crystal structure detn. The new crystals obtained with 25-40% pentaerythritol propoxylate belonged to orthorhombic space group C2221, with unit-cell parameters  $a = 73.2$ ,  $b = 216.4$ ,  $c = 214.3 \text{ \AA}$ , and diffracted beyond  $2.0 \text{ \AA}$  with synchrotron radiation. A further benefit of this precipitant for crystn. was its ability to function as a cryoprotectant, allowing the crystals to be transferred directly from the mother liquor to the N2 stream at 113 K.

IT 9051-49-4, Pentaerythritol propoxylate  
     (pentaerythritol propoxylate as a new crystn. agent and  
     cryoprotectant which induced the crystal growth of *Salmonella*  
     *enterica* 2-methylcitrate dehydratase)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-,  
     ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX  
     NAME)



CC 9-16 (Biochemical Methods)  
     Section cross-reference(s): 75

ST methylcitrate dehydratase crystal growth pentaerythritol  
     propoxylate precipitant

IT Crystal growth  
     *Salmonella enterica*  
         (pentaerythritol propoxylate as a new crystn. agent and  
         cryoprotectant which induced the crystal growth of *Salmonella*  
         *enterica* 2-methylcitrate dehydratase)

IT 9051-49-4, Pentaerythritol propoxylate  
     42503-45-7, Pentaerythritol ethoxylate  
         (pentaerythritol propoxylate as a new crystn. agent and  
         cryoprotectant which induced the crystal growth of *Salmonella*  
         *enterica* 2-methylcitrate dehydratase)

IT 80891-26-5, 2-Methylcitrate dehydratase  
         (pentaerythritol propoxylate as a new crystn. agent and  
         cryoprotectant which induced the crystal growth of *Salmonella*

enterica 2-methylcitrate dehydratase)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 11 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 136:168212 HCA Full-text

TI Dendritic macromolecule with improved polyether polyol solubility and process for production thereof

IN Pettersson, Bo; Bjoernberg, Hakan

PA Perstorp AB, Swed.

SO PCT Int. Appl., 23 pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2002010189	A2	20020207	WO 2001-SE1518	200107 02

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WO 2002010189 A3 20020418

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,  
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,  
UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
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CA 2417679 A1 20020207 CA 2001-2417679

200107  
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EP 1305358 A2 20030502 EP 2001-961471

200107  
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BR 2001012819 A 20030729 BR 2001-12819

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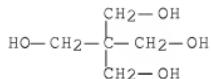
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HK 1059793	A1	20061013	HK 2004-102628	
				200404 15
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US 20050240000	A1	20051027	US 2005-158062	
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PRAI US 2000-221512P P 20000728 <--  
 WO 2001-SE1518 W 20010702 <--  
 US 2003-343046 A1 20030313 <--

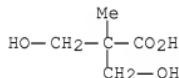
AB Disclosed is a dendritic macromol. having the following characteristics: (i) an active hydrogen content of at least 3.8 mmol/g and (ii) an active hydrogen functionality of at least 16 and which macromol. is mixable at a ratio of at least 15% with a polyether polyol having a hydroxyl value of at most 40 mg KOH/g to form a stable liq. at 23°. The subject dendritic macromol. confer significant load building properties to isocyanate based foams and elastomers such as polyurethane foams and elastomers and may be used for this purpose to partially or fully displace current relatively expensive chem. systems which are used to confer load building characteristics to such foams and elastomers.

IT 115-77-5DP, Pentaerythritol, alkoxylated, dendritic macromol. with 2,2-dimethylolpropionic acid, modified products 4767-03-7DP, 2,2-Dimethylolpropionic acid, reaction products with alkoxylated pentaerythritol (dendritic macromol. with improved polyether polyol solv. and process for prodn. thereof)

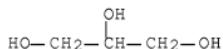
RN 115-77-5 HCA  
 CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



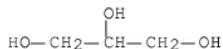
RN 4767-03-7 HCA  
 CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



IT 56-81-5DP, Glycerin, polyurethanes with dendritic macromol. and polyisocyanates  
 (dendritic macromol. with improved polyether polyc soly. and process for prodn. thereof)  
 RN 56-81-5 HCA  
 CN 1,2,3-Propanetriol (CA INDEX NAME)



IT 56-81-5D, Glycerol, polyether polycols  
 (soly. in; dendritic macromol. with improved polyether polycol soly. and process for prodn. thereof)  
 RN 56-81-5 HCA  
 CN 1,2,3-Propanetriol (CA INDEX NAME)



CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 39

ST dendritic macromol polyether polyol soly  
polyurethane foam elastomer; load building characteristic  
polyurethane foam elastomer dendritic macromol

IT Fatty acids, preparation  
(C9; reaction products with dendritic macromol.,  
modified products; dendritic macromol. with improved  
polyether polyol soly. and process for prodn. thereof)

IT Polyurethanes, preparation  
(cellular; dendritic macromol. with improved polyether  
polyol soly. and process for prodn. thereof)

IT Polyesters, preparation  
(dendrimers; dendritic macromol. with  
improved polyether polyol soly. and process for prodn.  
thereof)

IT Urethane rubber, preparation  
(dendritic macromol. with improved polyether  
polyol soly. and process for prodn. thereof)

IT Dendritic polymers  
(polyesters; dendritic macromol. with improved  
polyether polyol soly. and process for prodn. thereof)

IT Polyoxyalkylenes, miscellaneous  
(soly. in; dendritic macromol. with improved polyether  
polyol soly. and process for prodn. thereof)

IT 79-10-7DP, Acrylic acid, reaction products with  
dendritic macromol., redn. products 107-13-1DP,  
Acrylonitrile, reaction products with dendritic macromol.,  
redn. products 115-77-5DP, Pentaerythritol,  
alkoxylated, dendritic macromol. with  
2,2-dimethylolpropionic acid, modified products  
4767-03-7DP, 2,2-Dimethylolpropionic acid,  
reaction products with alkoxylated pentaerythritol  
26221-61-4DP, Trimethylolpropane oxetane polymer, modified products  
(dendritic macromol. with improved polyether  
polyol soly. and process for prodn. thereof)

IT 56-81-5DP, Glycerin, polyurethanes with dendritic  
macromol. and polyisocyanates 111-42-2DP, Dabco DEOA-LF,  
polyurethanes with dendritic macromol. and  
polyisocyanates, preparation 26471-62-5DP, TDI, polyurethanes with  
dendritic macromol. and polyols 122878-95-9DP,  
Lupranate T 80, polyurethanes with dendritic macromol. and  
polyols 395679-34-2DP, E 837, polyurethanes with  
dendritic macromol. and polyisocyanates 395680-09-8DP,  
Hyperlite E 850, polyurethanes with dendritic macromol.  
and polyisocyanates  
(dendritic macromol. with improved polyether

polyol solv. and process for prodn. thereof)  
IT 56-81-5D, Glycerol, polyether polyols  
(solv. in; dendritic macromol. with improved polyether  
polyol solv. and process for prodn. thereof)

L73 ANSWER 12 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 136:152361 HCA Full-text

TI Foamed dendritic polyol-based polyurethane  
having improved hardness properties and process for production  
thereof

IN Van Heumen, Jeffrey D.; Farkas, Paul V.; Stanciu, Romeo

PA Woodbridge Foam Corporation, Can.

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2002010247 A1 20020207 WO 2001-CA1086

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GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,  
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
TZ, UA, UG, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
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TD, TG

CA 2394563 A1 20020207 CA 2001-2394563

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US 20020061936 A1 20020523 US 2001-917235

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JP 2004505140 T 20040219 JP 2002-515974

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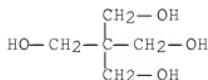
PRAI US 2000-221511P P 20000728 <--  
WO 2001-CA1086 W 20010730 <--

AB In one of its aspects, the present invention relates to foamed isocyanate-based polymer derived from a reaction mixt. comprising an isocyanate, an active hydrogen-contg. compd., a dendritic macromol. and a blowing agent; wherein at least 15% of the dendritic macromol. may be mixed with a polyether polyol having an OH no. less than about 40 mg KOH/g to form a stable liq. at 23°. The dendritic macromol. confers advantageous load building characteristics to the foamed isocyanate-based polymer and may be used to partially or fully displace the use of conventional copolymer polyols used. A process for prodn. of a foam isocyanate-based polymer and a process for conferring loading building properties to a foamed isocyanate-based polymer are also described.

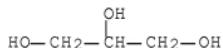
IT 115-77-5DP, Pentaerythritol, alkoxylated, reaction products with 2,2-dimethylolpropionic acid homopolymer, polyurethanes  
(dendritic; foamed dendritic polyol  
-based polyurethane having improved hardness properties and process for prodn. thereof)

RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



IT 56-81-5DP, Glycerin, polyurethanes with dendritic polyols  
(foamed dendritic polyol-based polyurethane  
having improved hardness properties and process for prodn.  
thereof)  
RN 56-81-5 HCA  
CN 1,2,3-Propanetriol (CA INDEX NAME)



IC ICM C08G018-42  
ICS C08G018-40  
CC 38-3 (Plastics Fabrication and Uses)  
ST dendrimer polyol polyurethane foam  
IT Polyurethanes, properties  
(dendrimers; foamed dendritic polyol  
-based polyurethane having improved hardness properties and  
process for prodn. thereof)  
IT Dendritic polymers  
(polyurethanes; foamed dendritic polyol-based  
polyurethane having improved hardness properties and process for  
prodn. thereof)  
IT 115-77-5DP, Pentaerythritol, alkoxylated, reaction  
products with 2,2-dimethylolpropionic acid homopolymer,  
polyurethanes 34590-77-7DP, 2,2-Dimethylolpropionic acid  
homopolymer, reaction products with alkoxylated  
pentaerythritol, polyurethanes  
(dendritic; foamed dendritic polyol  
-based polyurethane having improved hardness properties and  
process for prodn. thereof)  
IT 56-81-5DP, Glycerin, polyurethanes with dendritic  
polyols 111-42-2DP, Diethanolamine, polyurethanes with  
dendritic polyols, properties 122878-95-9DP,  
Lupranate T80, polyurethanes with dendritic  
polyols 395679-34-2DP, E 837, polyurethanes with  
dendritic polyols 395680-09-8DP, Hyperlite E  
850, polyurethanes with dendritic polyols  
(foamed dendritic polyol-based polyurethane  
having improved hardness properties and process for prodn.  
thereof)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 13 OF 33 HCA COPYRIGHT 2008 ACS on STN  
 AN 135:181482 HCA Full-text  
 TI Branched polymeric surfactant reaction products,  
 methods for their preparation, and uses therefor  
 IN Breindel, Kenneth; Broadbent, Ronald W.; Wiggins, Michael S.;  
 Natale, Marcie  
 PA Cognis Corporation, USA  
 SO PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001060901	A1	20010823	WO 2001-US5303	200102 16
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W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US	20010027227	A1	20011004	US 2001-783855	200102 15
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US	6465605	B2	20021015		
CA	2400780	A1	20010823	CA 2001-2400780	200102 16
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EP	1268636	A1	20030102	EP 2001-914407	200102 16
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R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR	2001008413	A	20030325	BR 2001-8413	

HU	2002004473	A2	20030528	HU	2002-4473	200102 16
JP	2003523433	T	20030805	JP	2001-560279	200102 16
ZA	2002006118	A	20031031	ZA	2002-6118	200207 31
MX	2002PA07697	A	20021011	MX	2002-PA7697	200208 09
IN	2002CN01276	A	20070817	IN	2002-CN1276	200208 14
NO	2002003868	A	20021015	NO	2002-3868	200208 15

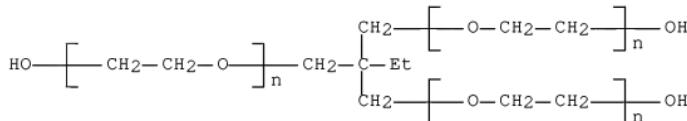
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	US	2000-182967P	P	20000216	<--
	US	2000-197243P	P	20000414	<--
	US	2001-783855	A	20010215	<--
	WO	2001-US5303	W	20010216	<--

OS MARPAT 135:181482

AB Polymeric compds. useful as low foaming surfactants and defoaming and stabilizing agents for aq.- and nonaq.-based compns., and processes for the prepn. of the polymeric compds., wherein the polymeric compds. are the reaction products of reactants comprising (A) at least one linking compd. of formula R1(X)3, wherein each X group is a halogen atom or one X group is halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R1 group to form an epoxy group, and R1 is an alkanetriyl C3-10 group; (B) compds. of formula R2(OA)nX, wherein R2 is a C4-36 org. group, n is integer  $\leq 200$ , X is OH, NHR', or SH and each OA group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, and (C) polyol contg.  $\geq 3$  OH with  $\geq 1$  of them being optionally alkoxylated; or polyamine contg.  $\geq 2$  amino groups optionally contg. alkyleneoxy groups.

IT 50586-59-9, Ethoxylated trimethylolpropane  
     (branched polymeric surfactant reaction  
     products, methods for prepn., and uses therefor)  
 RN 50586-59-9 HCA  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
     2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08K005-02  
     ICS C08K005-04; C08K005-053; C08K005-06  
 CC 37-6 (Plastics Manufacture and Processing)  
 ST branched polymeric compd surfactant defoamer  
     stabilizer; polyoxyalkylene compd surfactant defoamer stabilizer;  
     polyethylene glycol compd surfactant defoamer stabilizer;  
     polypropylene glycol compd surfactant defoamer stabilizer;  
     polyol compd surfactant defoamer stabilizer; polyamine compd  
     surfactant defoamer stabilizer  
 IT Epoxy resins, preparation  
     (branched polymeric surfactant reaction  
     products, methods for prepn., and uses therefor)  
 IT 106-89-8DP, Epichlorohydrin, reaction products with tetraethylene  
     glycol dodecyl ether, polymers with ethoxylated  
     pentaerythritol 5274-68-0DP, Tetraethylene glycol monododecyl  
     ether, reaction products with epichlorohydrin, polymers with  
     ethoxylated pentaerythritol 355404-22-7P 355404-25-0P  
     355404-26-1P 355404-27-2P 355407-02-2P 355808-44-5P  
     (branched polymeric surfactant reaction  
     products, methods for prepn., and uses therefor)  
 IT 355404-21-6P  
     (branched polymeric surfactant reaction  
     products, methods for prepn., and uses therefor)  
 IT 251903-91-0P 355808-42-3P 355808-43-4P  
     (branched polymeric surfactant reaction  
     products, methods for prepn., and uses therefor)  
 IT 106-89-8, Epichlorohydrin, reactions 5703-94-6, Tetraethylene  
     glycol monodecyl ether 50586-59-9, Ethoxylated  
     trimethylolpropane 355404-23-8 355808-41-2  
     (branched polymeric surfactant reaction

products, methods for prepn., and uses therefor)  
IT 42503-45-7D, Ethoxylated pentaerythritol, polymers with  
reaction products of epichlorohydrin with tetraethylene glycol  
dodecyl ether

(branched polymeric surfactant reaction

products, methods for prepn., and uses therefor)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 14 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 134:164643 HCA Full-text

TI Water-based ink-jet recording inks with high discharge stability and  
image concentration

IN Fujii, Yoshinori; Nozaki, Chiyoji; Ueda, Noboru

PA Minolta Camera Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2001040256	A	20010213	JP 1999-298143	199910 20

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PRAI JP 1999-142822 A 19990524 <--

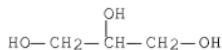
AB The title inks comprise a colorant, a water-based medium, a star polymer (A) formed by either ring opening polymn. of ethylene oxide or radical polymn. of vinyl monomers on a core mol., which can be a multivalent alc., carboxylic acid, amine or thiol having  $\geq 3$  functional groups, e.g., OH, carboxyl, amino or mercapto groups, and optionally a cyclic polysaccharide such as a cyclodextrin. Thus, poly(mg. ethylene oxide using 1,3,5-trihydroxybenzene as core gave an A, 5% of which was mixed with 5% Cab-O-Jet 300 (a carbon black dispersion), 10% glycerin, 1% triethanolamine and 70% water, stirred at room temp. for 3 h, treated by a homogenizer then pressure-filtered using 0.65  $\mu\text{m}$  membrane filter to give a title ink.

IT 56-81-5, Glycerin, uses

(moisturizing agent; for water-based ink-jet recording inks)

RN 56-81-5 HCA

CN 1,2,3-Propanetriol (CA INDEX NAME)



IC ICM C09D011-00  
 ICS B41J002-01; B41M005-00  
 CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74  
 ST discharge stability water based ink jet recording ink; image concn  
 water based ink jet recording ink; ethylene oxide ring opening  
 polymn star polymer recording ink; polyalc  
 alkoxylate star polymer dispersion  
 stabilizer ink jet ink; carboxylic acid alkoxylate  
 dispersion stabilizer ink jet ink; trihydroxybenzenealkoxylate  
 dispersion stabilizer ink jet ink; polyether polyol  
 dispersion stabilizer ink jet ink  
 IT 56-31-5, Glycerin, uses  
     (moisturizing agent; for water-based ink-jet recording inks)  
 IT 9003-01-4, Acrylic acid homopolymer 25549-84-2, Sodium  
 acrylate homopolymer 28902-82-1, Acryloylmorpholine homopolymer  
 57514-87-1, N,N-Dimethylacrylamide-2-hydroxyethyl methacrylate  
 copolymer 79704-36-2 120603-34-1, N,N-Dimethylacrylamide-2-  
 hydroxyethyl acrylate copolymer 146899-17-4, Acryloylmorpholine-  
 styrene copolymer  
     (star-shaped, pigment dispersing stability improver; for manuf.  
     of water-based ink-jet recording inks)

L73 ANSWER 15 OF 33 HCA COPYRIGHT 2008 ACS on STN  
 AN 134:49173 HCA Full-text  
 TI Positively chargeable electrostatographic developer  
 IN Nakamura, Masanobu; Furukawa, Toshiro; Toribayashi, Hideki; Oba,  
 Katsunori; Shimane, Yoshinori; Sugawara, Yoshizo  
 PA Dainippon Ink and Chemicals, Inc., Japan  
 SO Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000338721	A	20001208	JP 1999-152948	199905

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PRAI JP 1999-152948

19990531 <--

AB The title developer contains a binder resin, a colorant, a toner releasing agent, colored resin particles contg. a pos. chargeable chare-controlling agent, and a magnetic carrier coated with a resin, wherein the binder resin is a polyester made from an epoxy compd., polybasic compd. or the deriv. thereof, and a polyalc. The releasing agent contains carnauba wax, montan-wax fatty acid esters, or/and rice wax. The developer provides wide range fixing temp. and the improved offset-resistance.

IC ICM G03G009-087  
ICS G03G009-097; G03G009-08

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Fatty acids, reactions  
(C9-11-branched, glycidyl esters, copolymer with propoxylated bisphenol A and terephthalic acid; polyester resin in electrostatog. developer)

IT Fatty acids, reactions  
(montan-wax, esters; polyester resin in electrostatog. developer)

IT 100-21-0DP, Terephthalic acid, copolymer with Cardura E, propoxylated bisphenol A and Epiclon 695 25068-38-6DP, Epiclon 850, copolymer with Cardura E, propoxylated bisphenol A and terephthalic acid 37353-75-6DP, Propoxylated bisphenol A, copolymer with Crdura E, terephthalic acid and Epiclon 695 174477-43-1DP, Epiclon 695, copolymer with Cardura E, propoxylated bisphenol A and terephthalic acid  
(polyester resin in electrostatog. developer)

IT 278792-70-4P, Pentarythritol tetraglycidyl ether-terephthalic acid-propoxylated bisphenol A copolymer 312909-54-9P, Epiclon 695-terephthalic acid-propoxylated bisphenol A copolymer 312909-55-0P, Epiclon 850-terephthalic acid-propoxylated bisphenol A copolymer  
(polyester resin in electrostatog. developer)

L73 ANSWER 16 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 133:336023 HCA Full-text

TI Process for production of a dendritic polyester acrylate composition in the presence of alcohol

IN Pettersson, Bo; Bjornberg, Hakan

PA Perstorp AB, Swed.

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

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PI WO 2000064975

A1 20001102

WO 2000-SE696

200004  
12

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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,  
CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW,  
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

SE 9901517 A 20001028 SE 1999-1517

199904  
27

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SE 514075 C2 20001218

PRAI SE 1999-1517 A 19990427 <--

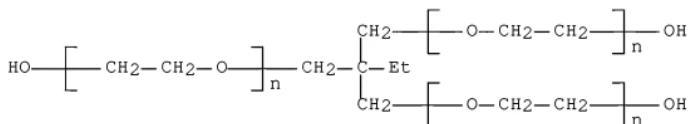
AB Process for prodn. of an acrylate compn., comprising ≥1 dendritic polyester acrylate oligomer and ≥1 acrylate monomer, comprises mixing ≥1 dendritic polyester having ≥1 terminal hydroxyl groups and ≥1 alc. having ≥1 hydroxyl groups and a mol. wt. of ≤2000. Obtained mixt. is subsequently acylated by reaction with ≥1 compd. comprising ≥1 acrylic unsatn. yielding a reaction mixt. comprising an acrylate compn. comprising ≥1 dendritic polyester acrylate oligomer and ≥1 acrylate monomer, whereby the acrylate compn. can be recovered from the reaction mixt. Thus, Boltorn H 20, 40.0, acrylic acid 163.8, and TP 30 160.0 g, 10 drops nitrobenzene and 0.5 g methoxyphenol in toluene were heated at 55°, 3.27 g methanesulfonic acid was added, heated at 110° until esterification water evapn. ceased to give an acylated product showing conversion of OH group to acrylate 94.5 mol%, final acid value 0.75 mg-KOH/g, viscosity (Brookfield 23°) 180 mPas., and non-volatile content 98.9%, compared with conversion of OH group to acrylate 95.1 mol%, final acid value 5.4 mg-KOH/g, viscosity (Brookfield 23°) 53,600 mPas., and non-volatile content 98.2% without alc. A lacquer formulation was prep'd. by addn. of 4.0% Darocure 1173 (photoinitiator) to 96.0% above acylated product, which was coated at a film thickness of 30 µm on a glass panel and UV cured in a UV oven (20 m/min, 240 mJ/m<sup>2</sup>) using 1, 2, and 4 passages through the oven to give cured films having high surface gloss, which were conditioned at 23° and 50% relative humidity for 24 h showing film hardness 109 Ks (1 passage), 134 Ks (2 passages), and 151 Ks (4 passages).

IT 50586-59-9, TP 30

(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08L067-04

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 42

ST dendritic polyester acrylate prepн lacquer

IT Alcohols, reactions

(aliph.; process for prodn. of dendritic polyester  
acrylate compn. in presence of alc.)

IT Polyesters, preparation

Polyesters, preparation

(dendrimers, acrylates, optionally polymers with  
acrylic monomers; process for prodn. of dendritic  
polyester acrylate compn. in presence of alc.)

IT Dendritic polymers

Dendritic polymers

(polyesters, acrylates, optionally polymers with acrylic  
monomers; process for prodn. of dendritic polyester  
acrylate compn. in presence of alc.)

IT Alcohols, reactions

(polyhydric; process for prodn. of dendritic  
polyester acrylate compn. in presence of alc.)

IT Glycols, reactions

Polyoxyalkylenes, reactions

(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc.)

IT Lacquers

(process for prodn. of dendritic polyester acrylate  
compn. in presence of alc. useful for)

IT 77-85-0 77-99-6, Trimethylolpropane 115-77-5, reactions  
115-84-4, 2-Butyl-2-ethyl-1,3-propanediol 126-30-7 126-58-9,  
Dipentaerythritol 23235-61-2, Ditrimethylolpropane 34541-79-2,  
Ditrimethylolethane

(dendritic polyester core; process for prodn. of dendritic polyester acrylate compn. in presence of alc.)

IT 37314-71-9P, TP 30 acrylate  
 (process for prodn. of dendritic polyester acrylate compn. in presence of alc.)

IT 303765-85-7P, Boltorn H 20 acrylate  
 (process for prodn. of dendritic polyester acrylate compn. in presence of alc.)

IT 303765-86-8P, Boltorn H 20 acrylate-TP 30 acrylate copolymer  
 (process for prodn. of dendritic polyester acrylate compn. in presence of alc.)

IT 57-55-6, 1,2-Propanediol, reactions 71-36-3, Butanol, reactions 79-10-7, Acrylic acid, reactions 107-21-1, 1,2-Ethanediol, reactions 111-27-3, Hexanol, reactions 111-46-6, reactions 111-70-6, 1-Heptanol 111-87-5, 1-Octanol, reactions 112-27-6 112-30-1, Decanol 143-08-8, Nonanol 504-63-2, 1,3-Propylene glycol 4740-78-7, 5-Hydroxy-1,3-dioxane 24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol 25265-75-2, Butanediol 25322-68-3 25322-69-4, Polypropylene glycol 25917-35-5, Hexanol 28473-21-4, Nonanol 29063-28-3, Octanol 35296-72-1, Butanol 36729-58-5, Decanol 50586-59-9, TP 30 53535-33-4, Heptanol 98025-65-1, 1,3-Dioxolan-4-ol 245662-64-0, Boltorn H 20  
 (process for prodn. of dendritic polyester acrylate compn. in presence of alc.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 17 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 133:242651 HCA Full-text

TI Nanocapsules based on dendritic polymers

IN Simonnet, Jean-Thierry; Richart, Pascal

PA L'oreal, Fr.

SO Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

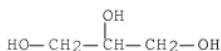
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PI	EP 1034839	A1	20000913	EP 2000-400503	200002 24
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	EP 1034839	B1	20001024		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

FR 2790405	A1	20000908	FR 1999-2579	
				199903
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FR 2790405	B1	20010420		
US 6379683	B1	20020430	US 2000-507925	
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AT 207386	T	20011115	AT 2000-400503	
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ES 2161675	T3	20011216	ES 2000-400503	
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JP 2000256183	A	20000919	JP 2000-55402	
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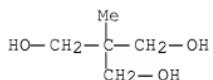
PRAI FR 1999-2579            A        19990302    <--  
 AB    Pharmaceutical nanocapsules comprise a lipid core contg. a lipophilic active principle and a water-insol. envelop based on dendritic polymers such as polyesters with modified hydroxyl terminal. The nanocapsules are used in cosmetic and/or dermatol. compns. Boltorn H40 (a dendritic polyester) 1, capric acid/caprylic acid triglyceride contg. 10% retinol 5, Pluronic L121 in 1 g in 200 mL of acetone-ethanol mixt. was mixed under inert atm. with a soln. of 0.5g Pluronic F68 in 300 mL water. The solvents were then evapd. to obtain a final vol. of 100 mL of an aq. suspension contg. nanocapsules of av. 230 nm.

IT    56-81-5, 1,2,3-Propanetriol, uses 77-85-0  
 77-99-6, Trimethylolpropane 115-77-5, uses  
 115-77-5D, Pentaerythritol, alkoxylated  
 126-30-7 126-58-9, Dipentaerythritol  
 23235-61-2, D trimethylolpropane 34541-79-2,  
 D trimethylethane 50586-59-9  
 (nanocapsules based on dendritic polymers)

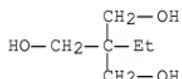
RN    56-81-5 HCA  
 CN    1,2,3-Propanetriol (CA INDEX NAME)



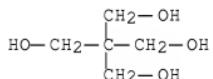
RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



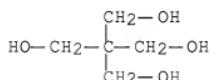
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



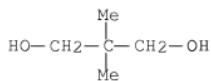
RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



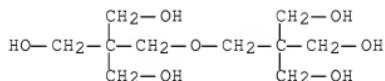
RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



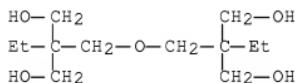
RN 126-30-7 HCA  
CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



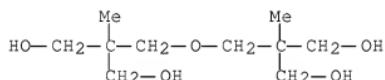
RN 126-58-9 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



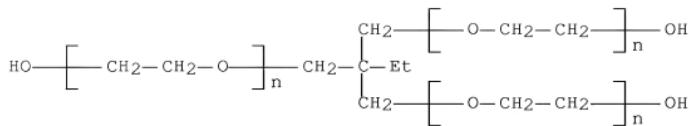
RN 23235-61-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



RN 50586-59-9 HCA  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



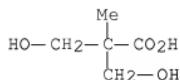
IC ICM B01J013-04  
 ICS A61K007-00; A61K009-51  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 38  
 ST pharmaceutical nanocapsules dendritic polymer polyester;  
 cosmetic nanocapsules dendritic polymer polyester  
 IT Wound healing promoters  
     (cicatrizers; nanocapsules based on dendritic  
     polymers)  
 IT Polyesters, biological studies  
 Polyesters, biological studies  
     (dendrimers; nanocapsules based on dendritic  
     polymers)  
 IT Cosmetics  
     Drug delivery systems  
         (emollients; nanocapsules based on dendritic polymers)  
 IT Drug delivery systems  
     (emulsions; nanocapsules based on dendritic polymers)  
 IT Fatty acids, biological studies  
     (essential; nanocapsules based on dendritic polymers)  
 IT Drug delivery systems  
     (gels; nanocapsules based on dendritic polymers)  
 IT Acne  
     Seborrhea  
         (inhibitors; nanocapsules based on dendritic polymers)  
 IT Radicals, biological studies  
     (inhibitors; nanocapsules based on dendritic polymers)  
 IT Drug delivery systems  
     (lotions; nanocapsules based on dendritic polymers)  
 IT Cosmetics  
     (moisturizers; nanocapsules based on dendritic  
     polymers)  
 IT Anesthetics  
     Anti-inflammatory agents  
     Antibacterial agents  
     Antihistamines

- Antiviral agents
- Catalysts
- Cosmetics
- Dyes
- Fungicides
- Oxidizing agents
- Perfumes
- Preservatives
- Sunscreens
- Surfactants
- Thickening agents
- pH
  - (nanocapsules based on dendritic polymers)
- IT Carotenes, biological studies
  - Dendritic polymers
- Lecithins
- Petrolatum
- Phospholipids, biological studies
- Vitamins
  - (nanocapsules based on dendritic polymers)
- IT Drug delivery systems
  - (nanocapsules; nanocapsules based on dendritic polymers)
- IT Skin, disease
  - (pigmentation, modifiers; nanocapsules based on dendritic polymers)
- IT Dendritic polymers
  - Dendritic polymers
    - (polyesters; nanocapsules based on dendritic polymers)
- IT 34590-77-7, 2,2-Dimethylolpropionic acid homopolymer 212335-26-7
  - (dendritic; nanocapsules based on dendritic polymers)
- IT 69-72-7D, Salicylic acid, derivs. 1406-16-2, Vitamin d 1406-18-4, Vitamin e 7235-40-7,  $\beta$ -Carotene 9003-11-6, Ethylene oxide propylene oxide copolymer 11103-57-4, Vitamin a 78418-01-6, Octanoyl-5-salicylic acid 78418-02-7 78418-03-8, n-Dodecanoyl-5-salicylic acid 127941-89-3 127941-90-6 221680-82-6, Boltorn H 30 245662-64-0, Boltorn H 40
  - (nanocapsules based on dendritic polymers)
- IT 56-81-5, 1,2,3-Propanetriol, uses 77-85-0 77-99-6, Trimethylolpropane 115-77-5, uses 115-77-5D, Pentaerythritol, alkoxylated 126-30-7 126-58-9, Dipentaerythritol 6228-25-7, 1,3-Dioxane-5,5-dimethanol 23235-61-2, Ditrimethylolpropane 34541-79-2, Ditrimethylolethane 50586-59-9
  - (nanocapsules based on dendritic polymers)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 18 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 133:193552 HCA Full-text  
TI Amphiphilic Stars and Dendrimer-Like Architectures Based  
on Poly(Ethylene Oxide) and Polystyrene  
AU Angot, Stephanie; Taton, Daniel; Gnanou, Yves  
CS Laboratoire de Chimie des Polymères Organiques, ENSCPB-CNRS-  
Université Bordeaux 1, Talence, 33402, Fr.  
SO Macromolecules (2000), 33(15), 5418-5426  
CODEN: MAMOBX; ISSN: 0024-9297  
PB American Chemical Society  
DT Journal  
LA English  
AB Newly designed star-shaped and dendrimer-like copolymers made of poly(ethylene oxide) (PEO) and polystyrene (PS) were synthesized by sequential anionic polymn. of ethylene oxide and atom transfer radical polymn. (ATRP) of styrene, the switch from the first to the second mechanism being obtained by selective transformation of "living" oxanionic sites. First, tri- and tetrafunctional initiators were used to anionically polymerize ethylene oxide and produce tri- and tetra-armed PEO stars. Next, the OH end groups of PEO star branches were derivatized into 2-bromopropionate groups giving rise to the corresponding tri- and tetrabromoester ended-PEO stars; the latter served as macroinitiators for the ATRP of styrene at 100 °C in the presence of CuBr/2,2'-bipyridine catalyst system affording amphiphilic star block copolymers PEOn-b-PSn (n = 3 or 4). PEOn-b-PS2n (n = 3 or 4) dendrimer-like copolymers constituted of an inner PEO part and an outer PS layer were prep'd. by introducing a branching agent at the OH termini of the PEO arms before growing the PS generation by ATRP. The same branching agent was used in the prepn. of miktoarmed PEO-b-PS2 copolymers and PS2-b-PEO-b-PS2 H-type copolymers, starting from  $\omega$ -OH and  $\alpha,\omega$ -di-OH PEO, resp. The samples obtained were characterized by NMR spectroscopy and size exclusion chromatog. equipped with a multiangle laser light scattering detector. These copolymers exhibited the expected structure, as confirmed after cleavage of the ester functions linking the PEO arm ends to PS moieties. Indeed, the hydrolyzed PS arms isolated were of low polydispersity index and their molar masses were in good agreement with the values calcd. by NMR on the corresponding star-shaped and dendrimer-like copolymers.  
IT 4767-03-7  
(in prepn. of branching agent; prepn. and properties of  
amphiphilic stars and dendrimer-like architectures  
based on poly(ethylene oxide) and polystyrene)  
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



IT 75-21-8, Oxirane, reactions 77-99-6,  
Trimethylolpropane 115-77-5, reactions  
(prep. and properties of amphiphilic stars and dendrimer  
-like architectures based on poly(ethylene oxide) and  
polystyrene)

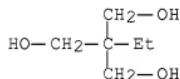
RN 75-21-8 HCA

CN Oxirane (CA INDEX NAME)



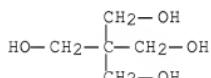
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 36

ST oxyethylene styrene block copolymer dendrimer  
amphiphilic star

IT Polymerization  
(anionic, living; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT Polymerization  
(atom transfer, radical; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT Polyoxyalkylenes, preparation  
(polystyrene-, block, star-shaped; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT Dendritic polymers  
(prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT Polymers, preparation  
(star-branched; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT 288846-85-5P  
(branching agent; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT 563-76-8, 2-Bromopropionyl bromide 4767-03-7  
(in prepn. of branching agent; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT 42503-45-7P 50586-59-9P 226070-93-5P 226070-94-6P  
(macroinitiator; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT 75-21-8, Oxirane, reactions 77-99-6,  
Trimethylolpropane 115-77-5, reactions  
(prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

IT 107311-90-0DP, Ethylene oxide-styrene block copolymer,  
hydrolyzed  
(star-shaped; prepn. and properties of amphiphilic stars and dendrimer-like architectures based on poly(ethylene oxide) and polystyrene)

RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 19 OF 33 HCA COPYRIGHT 2008 ACS on STN  
 AN 132:251553 HCA Full-text  
 TI Preparation of primary epoxides by oxidation of  $\alpha$ -alkenoic acid/polyol ester  
 IN Bjornberg, Hakan; Pettersson, Bo  
 PA Perstorp AB, Swed.  
 SO PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2000018751	A1	20000406	WO 1999-SE1704	199909 27	
					<--	
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
SE	9803270	A	20000329	SE 1998-3270	199809 28	
					<--	
PRAI	SE 515019	C2	20010528			
	SE 1998-3270	A	19980928	<--		
AB	A new range of epoxides having at least one primary epoxide group is obtained from esterification products having at least one primary alkenyl group, and the esterification products are prepd. when an alc. is esterified at a hydroxy:carboxyl molar ratio of 1:0.8-5, with at least one linear or branched alkenoic acid having one carboxyl group and one primary alkenyl group. The alkenyl group or groups of the esterification products is/are, after an optional removal of excess or otherwise unreacted carboxylic acid, oxidized in the presence of an effective amt. of at least one oxidizing agent to yield corresponding no. of primary epoxide groups. In a further aspect, a process for prodn. of said epoxides is provided and in yet a further aspect a curable compn. comprising at least one epoxide as provided by the present invention. Thus, an epoxide prepd. by (step					

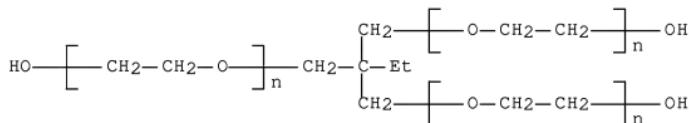
1) esterifying 5 mol of trimethylolpropane and 15 mol of 10-undecenoic acid with 3% of xylene as azeotropic solvent at 240° until an acid value of 10-12, and (step 2) oxidizing with 0.5 mol/mol unsatn. of acetic acid and 1.45 mol/mol unsatn. of hydrogen peroxide in presence of an ion exchange resin (DowexTM M-31H) at 60° for 10 h, centrifuging, washing the org. phase, and vaporizing the solvent had mol. wt. 680, epoxy eq. 314, remaining unsatn. 21.3 I2/100 g, acid value 7.6, viscosity at 23° 176 mPa, non-volatile content 95.2% and yield 72.9%.

IT 50586-59-9DP, EthoxyLATED trimethylolpropane,  
ester with 10-undecenoic acid

(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)

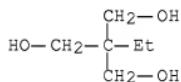


IT 77-99-6D, Trimethylolpropane, alkoxyLATED deriv.  
50586-59-9

(in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

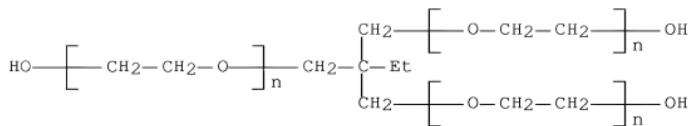
RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C07D301-19  
 ICS C07D303-38; C07D303-40; C07D303-42; C08G059-14; C08G059-20;  
 C08G059-40

CC 35-2 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 27, 37

ST epoxy resin primary prepn esterification oxidn; alpha alkenoic acid  
 polyol esterification oxidn; undecenoic acid  
 trimethylolpropane ester peroxy oxidn

IT Esterification catalysts  
 Oxidation catalysts

(Dowex M31, acids; prepn. of primary epoxides by oxidn. of  
 $\alpha$ -alkenoic acid/polyalc. ester)

IT Ion exchangers  
 (acid catalyst; in prepn. of primary epoxides by oxidn. of  
 $\alpha$ -alkenoic acid/polyalc. ester)

IT Carboxylic acids, uses  
 (formic acid and acetic acid; in prepn. of primary epoxides by  
 oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT Dendritic polymers  
 (in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
 acid/polyalc. ester)

IT Epoxides  
 (in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
 acid/polyalc. ester)

IT Peroxy acids  
 (in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic  
 acid/polyalc. ester)

IT Alcohols, reactions  
 (polyhydric; in prepn. of primary epoxides by oxidn. of  
 $\alpha$ -alkenoic acid/polyalc. ester)

IT Epoxy resins, preparation  
 (prep. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/  
 polyalc. ester)

IT Alkenes, reactions  
 ( $\alpha$ -, terminal carboxylic acid; in prepn. of primary  
 epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc.

ester)

IT 75-75-2, Methanesulfonic acid 104-15-4, uses 106153-00-8, Dowex M-31  
 (catalyst; in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 77-99-6DP, Trimethylolpropane, ester with 10-undecenoic acid 112-38-9DP, 10-Undecenoic acid, ester with trimethylolpropane 50536-59-9DP, EthoxyLATED trimethylolpropane, ester with 10-undecenoic acid 130049-52-4P 263011-96-7P  
 (in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 64-18-6, Formic acid, uses 64-19-7, Acetic acid, uses 79-21-0, Peroxyacetic acid 93-59-4, Peroxybenzoic acid 107-32-4, Peroxyformic acid 359-48-8, Trifluoroperoxyacetic acid 937-14-4, m-Chloroperoxybenzoic acid 7722-84-1, Hydrogen peroxide, uses (in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 56-81-5, 1,2,3-Propanetriol, reactions 75-21-8, Oxirane, reactions 75-56-9, reactions 77-99-6D, Trimethylolpropane, alkoxyLATED deriv. 96-09-3, Phenylethylene oxide 115-77-5, reactions 115-84-4 126-30-7 504-63-2D, 1,3-Propanediol, 2-alkyl derivs. 14436-32-9, 9-Decenoic acid 26249-20-7, Butylene oxide 50586-59-9  
 (in prepn. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 111044-65-6P 263011-97-8P  
 (prepн. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester)

IT 263011-98-9P 263011-99-0P  
 (prepн. of primary epoxides by oxidn. of  $\alpha$ -alkenoic acid/polyalc. ester and its use as epoxy resin)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 20 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 132:241673 HCA Full-text

TI Cosmetic or dermatologic topical compositions containing dendritic polyesters

IN Tournilhac, Florence; Simon, Pascal

PA L'oreal, Fr.

SO Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

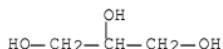
PI	EP 987017	A1	20000322	EP 1999-402161	
					199908 31
				<--	
EP 987017	B1	20010613			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
FR 2783417	A1	20000324	FR 1998-11634		199809 17
				<--	
FR 2783417	B1	20020628			
ES 2159985	T3	20011016	ES 1999-402161		199908 31
				<--	
KR 2000022982	A	20000425	KR 1999-38070		199909 08
				<--	
MX 9908346	A	20000831	MX 1999-8346		199909 10
				<--	
JP 2000086492	A	20000328	JP 1999-262646		199909 16
				<--	
JP 3650553	B2	20050518			
CN 1249169	A	20000405	CN 1999-118879		199909 16
				<--	
BR 9904650	A	20001114	BR 1999-4650		199909 16
				<--	
US 6287552	B1	20010911	US 1999-397517		199909 17
				<--	
PRAI FR 1998-11634	A	19980917	<--		
AB Cosmetic or dermatol. topical compns. for application on skin, hair, and nail contain hydroxy-terminated dendritic polyesters and film- forming polymers. A cream contained poly(vinyl alc.) 1.5, dendritic					

polyester (Boltron H40TMP) 0.25, glycerol 3, glyceryl stearate 1, karite oil 5, tocopherol 1, Et alc. 2, cyclomethicone 5, PEG-40 stearate 1.2, Et alc. 2, perfumes 0.4, preservatives 0.3, and water q.s. 100%.

IT 56-81-5, Glycerol, biological studies 77-85-0,  
Trimethylolethane 77-99-6, Trimethylolpropane  
77-99-6D, Trimethylolpropane, alkoxylated  
99-10-5 115-77-5, Pentaerythritol, biological  
studies 115-77-5D, Pentaerythritol, alkoxylated  
126-30-7, Neopentylglycol 126-53-9,  
Dipentaerythritol 2831-90-5 4767-03-7,  
Dimethylolpropionic acid 10097-02-6 10097-03-7  
23235-61-2, Ditrimethylolpropane 34541-79-2,  
Ditrimethylolethane  
(cosmetic or dermatol. topical compns. contg. dendritic  
polyesters)

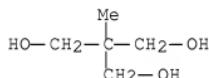
RN 56-81-5 HCA

CN 1,2,3-Propanetriol (CA INDEX NAME)



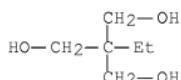
RN 77-85-0 HCA

CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)

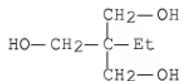


RN 77-99-6 HCA

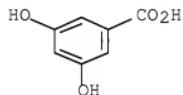
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



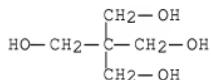
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



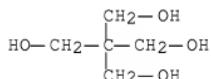
RN 99-10-5 HCA  
CN Benzoic acid, 3,5-dihydroxy- (CA INDEX NAME)



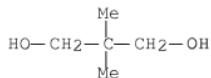
RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



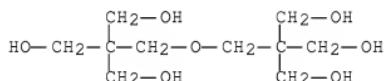
RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



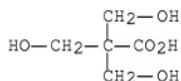
RN 126-30-7 HCA  
CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



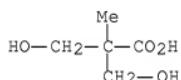
RN 126-58-9 HCA  
 CN 1,3-Propanediol, 2,2'-(oxybis(methylene))bis[2-(hydroxymethyl)- (CA INDEX NAME)



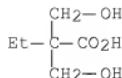
RN 2831-90-5 HCA  
 CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



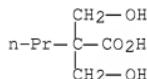
RN 4767-03-7 HCA  
 CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



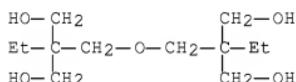
RN 10097-02-6 HCA  
 CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



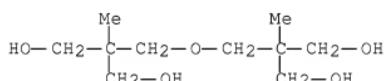
RN 10097-03-7 HCA  
 CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



RN 23235-61-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



IC ICM A61K007-48  
 CC 62-4 (Essential Oils and Cosmetics)  
 ST cosmetic cream polymer dendritic polyester  
 IT Polysiloxanes, biological studies  
     (acrylate siloxanes; cosmetic or dermatol. topical compns. contg.

- IT      dendritic polyesters)
- IT      Polyurethanes, biological studies  
          (acrylates; cosmetic or dermatol. topical compns. contg.  
          dendritic polyesters)
- IT      Anesthetics
  - Anti-inflammatory agents
  - Antihistamines
  - Antiviral agents
  - Catalysts
  - Fungicides
  - Gelation agents
  - Perfumes
  - Plasticizers
  - Preservatives
  - Sunscreens
  - Surfactants
  - Thickening agents
    - (cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT      Acrylic polymers, biological studies  
Carboxylic acids, biological studies  
Ceramides  
Polyamides, biological studies  
Polysiloxanes, biological studies  
Polyureas  
Polyurethanes, biological studies  
Proteins, general, biological studies  
Vitamins
  - (cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT      Glycols, uses
  - (cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT      Cosmetics
  - (creams; cosmetic or dermatol. topical compns. contg.  
          dendritic polyesters)
- IT      Polyesters, biological studies  
Polyesters, biological studies
  - (dendrimers; cosmetic or dermatol. topical compns.  
          contg. dendritic polyesters)
- IT      Cosmetics
  - (emollients; cosmetic or dermatol. topical compns. contg.  
          dendritic polyesters)
- IT      Fatty acids, biological studies
  - (esters; cosmetic or dermatol. topical compns. contg.  
          dendritic polyesters)
- IT      Glycols, uses

- Glycols, uses
  - (ethers; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (eye liners; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Polymers, biological studies
  - (film-forming; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Keratins
  - (formation inhibitors; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (foundations; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Ethers, uses
  - Ethers, uses
    - (glycol; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Carboxylic acids, biological studies
  - (hydroxy; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Seborrhea
  - (inhibitors; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Radicals, biological studies
  - (inhibitors; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (lipsticks; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (makeups; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (moisturizers; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Cosmetics
  - (nail lacquers; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Solvents
  - (org.; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Skin, disease
  - (pigmentation, modulators; cosmetic or dermatol. topical compns. contg. dendritic polyesters)
- IT Polyesters, biological studies

Polyesters, biological studies  
(polyamide-; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT Polyamides, biological studies

Polyamides, biological studies

Polyurethanes, biological studies  
(polyester-; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT Dendritic polymers  
Dendritic polymers  
(polyesters; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT Polyurethanes, biological studies  
(polyether-; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT Polyurethanes, biological studies  
Polyurethanes, biological studies  
(polyurea-; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT Polyureas  
Polyureas  
(polyurethane-; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT Fats and Glyceridic oils, biological studies  
(vegetable; cosmetic or dermatol. topical compns. contg.  
dendritic polyesters)

IT 98002-50-7, Airvol 540 212335-26-7  
(cosmetic or dermatol. topical compns. contg. dendritic  
polyesters)

IT 56-81-5, Glycerol, biological studies 77-85-0,  
Trimethylolethane 77-99-6, Trimethylolpropane  
77-99-6D, Trimethylolpropane, alkoxylated  
88-12-0D, polymers with urethanes 99-10-5 115-77-5  
, Pentaerythritol, biological studies 115-77-5D,  
Pentaerythritol, alkoxylated 126-30-7,  
Neopentylglycol 126-58-9, Dipentaerythritol 1825-45-2  
2831-90-5 4767-03-7, Dimethylolpropionic acid  
6228-25-7, 1,3-Dioxane-5,5-dimethanol 9002-89-5, Polyvinyl alcohol  
9003-20-7, Poly(vinyl acetate) 10097-02-6  
10097-03-7 23235-61-2, Ditrimethylolpropane  
34541-79-2, Ditrimethylolethane  
(cosmetic or dermatol. topical compns. contg. dendritic  
polyesters)

IT 67-63-0, Isopropanol, uses 107-21-1D, Ethylene glycol, alkyl  
ethers 111-46-6, Diethylene glycol, uses 111-46-6D, Diethylene  
glycol, alkyl ethers  
(cosmetic or dermatol. topical compns. contg. dendritic

polyesters)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 21 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 132:241672 HCA Full-text

TI Antiwrinkle cosmetic containing a combination of tensor polymers  
from synthetic and/or natural origin and dendritic  
polyesters

IN Simon, Pascal; Chevalier, Veronique

PA L'oreal, Fr.

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT Patent

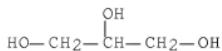
LA French

FAN.CNT 1

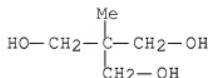
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 987016	A1	20000322	EP 1999-402160	199908 31
				<--	
	EP 987016	B1	20020410		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	FR 2783418	A1	20000324	FR 1998-11635	199809 17
				<--	
	FR 2783418	B1	20001110		
	AT 215812	T	20020415	AT 1999-402160	199908 31
				<--	
	ES 2175908	T3	20021116	ES 1999-402160	199908 31
				<--	
	MX 9908348	A	20000831	MX 1999-8348	199909 10
				<--	
	JP 2000086491	A	20000328	JP 1999-260942	199909 14
				<--	

CN 1249170	A	20000405	CN 1999-118881	
				199909
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			<--	
KR 2000023218	A	20000425	KR 1999-39822	
				199909
				16
			<--	
BR 9904649	A	20001114	BR 1999-4649	
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				16
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US 6284233	B1	20010904	US 1999-397521	
				199909
				17
			<--	

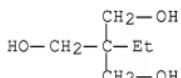
PRAI FR 1998-11635        A     19980917    <--  
 AB Antiwrinkle compns. contain a combination of tensor polymers from synthetic and/or natural origin capable of forming a permeable film after application of a 7% soln. on skin, having Young modulus of 108-10 N/m<sup>2</sup>, and dendritic polyesters. An antiwrinkle cream contained cetyl alc. 1.5, vaseline oil 5, cyclomethicone 7, sorbitan tristearate 1.3, PEG 40 stearate 2.7, soya protein 2.7, Sancure 2060 10, Boltorn H 40 TMP 0.2, Et alc. 10, perfumes, preservatives and water q.s. 100%.  
 IT 56-81-5, Glycerol, biological studies 77-35-0,  
 Trimethylolethane 77-99-6, Trimethylolpropane  
 77-99-6D, Trimethylolpropane, alkoxylated  
 99-10-5 115-77-5, Pentaerythritol, biological  
 studies 115-77-5D, Pentaerythritol, alkoxylated  
 126-30-7, Neopentylglycol 126-58-9,  
 Dipentaerythritol 2831-90-5 4767-03-7,  
 Dimethylolpropionic acid 10097-02-6 10097-03-7  
 23235-61-2, D trimethylolpropane 34541-79-2,  
 D trimethylolethane  
 (antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)  
 RN 56-81-5 HCA  
 CN 1,2,3-Propanetriol (CA INDEX NAME)



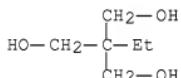
RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



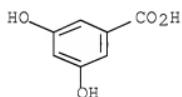
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



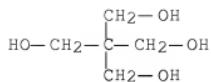
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



RN 99-10-5 HCA  
CN Benzoic acid, 3,5-dihydroxy- (CA INDEX NAME)

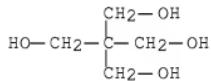


RN 115-77-5 HCA  
CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



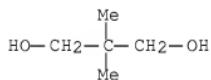
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



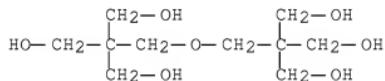
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



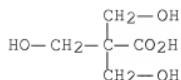
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



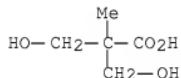
RN 2831-90-5 HCA

CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



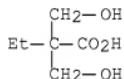
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



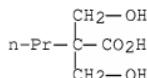
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



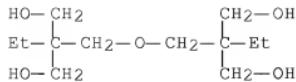
RN 10097-03-7 HCA

CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)

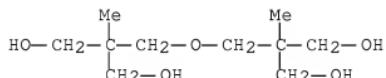


RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA  
 CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX  
 NAME)



IC ICM A61K007-48  
 CC 62-4 (Essential Oils and Cosmetics)  
 ST antiwrinkle cosmetic polymer dendritic polyester  
 Resins  
 (Manila elemi; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)  
 IT Wheat  
 (Spelta Group, ext.; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)  
 IT Polyurethanes, biological studies  
 (acrylates; antiwrinkle cosmetic contg. combination of tensor  
 polymers from synthetic and/or natural origin and  
 dendritic polyesters)  
 IT Bean (*Phaseolus vulgaris*)  
 Catalysts  
 Gelation agents  
 Pea  
 Perfumes  
 Plasticizers  
 Preservatives  
 Rye  
 Sunscreens  
 Surfactants  
 Thickening agents  
 Wheat

(antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

- IT Acrylic polymers, biological studies
- Carboxylic acids, biological studies
- Ceramides
- Polymers, biological studies
- Polysiloxanes, biological studies
- Polyureas
- Polyurethanes, biological studies
- Retinoids
- Shellac
- Vitamins
  - (antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Resins
  - (copals; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Cosmetics
  - (creams; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Polyesters, biological studies
- Polyesters, biological studies
  - (dendrimers; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Cyclosiloxanes
  - (di-Me; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Proteins, general, biological studies
  - (egg; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Cosmetics
  - (emollients; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Lentil
  - (ext., antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)
- IT Corn
  - Lupine (*Lupinus*)

Sesame (*Sesamum indicum*)  
Soybean (*Glycine max*)  
(ext.; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
(gels; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Keratins  
(hydrolyzates; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Carboxylic acids, biological studies  
(hydroxy; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Radicals, biological studies  
(inhibitors; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
(lotions; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
(moisturizers; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Polyurethanes, biological studies  
(polyester-; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Dendritic polymers  
Dendritic polymers  
(polyesters; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Polyurethanes, biological studies  
(polyether-; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Resins  
(sandarac; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Proteins, general, biological studies

(soybean; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
(sticks; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Skin  
(stratum corneum; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Fats and Glyceridic oils, biological studies  
(vegetable; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT Cosmetics  
(wrinkle-preventing; antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT 9011-16-9, Antaron ST 06 159778-06-0, Sancure 815 212335-26-7  
(antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

IT 56-81-5, Glycerol, biological studies 77-85-0,  
Trimethylolethane 77-99-6, Trimethylolpropane  
77-99-6D, Trimethylolpropane, alkoxylated  
88-12-0D, polymers with urethanes 99-10-5 115-77-5  
, Pentaerythritol, biological studies 115-77-5D,  
Pentaerythritol, alkoxylated 121-91-5D, Isophthalic acid, polymers 126-30-7, Neopentylglycol 126-58-9  
, Dipentaerythritol 1398-61-4, Chitin 1825-45-2  
2831-90-5 4767-03-7, Dimethylolpropionic acid  
6228-25-7, 1,3-Dioxane-5,5-dimethanol 9003-05-8, Polyacrylamide 9004-34-6D, Cellulose, derivs., biological studies 9012-76-4,  
Chitosan 10097-02-6 10097-03-7  
23235-61-2, D trimethylolpropane 34541-79-2,  
D trimethylolethane 66267-50-3, Chitosan lactate 78809-92-4D,  
derivs. 83512-85-0D, Carboxymethylchitosan, succinamide derivs.  
84069-44-3, Hydroxypropyl chitosan 84563-76-8, Chitosan glutamate  
(antiwrinkle cosmetic contg. combination of tensor polymers from synthetic and/or natural origin and dendritic polyesters)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

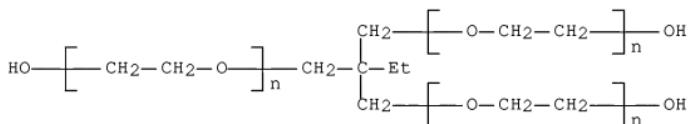
L73 ANSWER 22 OF 33 HCA COPYRIGHT 2008 ACS on STN  
AN 130:96961 HCA Full-text

TI Aqueous urethane/acrylic resins with branched  
 chain extension and coating compositions  
 IN Swarup, Shanti; Natesh, Anbazhagan; Fortuna, Norene E.; Olson, Kurt  
 G.  
 PA PPG Industries, Inc., USA  
 SO U.S., 12 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5854332	A	19981229	US 1996-771194	19961220

<--

PRAI US 1996-771194 19961220 <--  
 AB Aq. dispersions of urethane polymers and vinyl polymers (e.g.,  
 acrylics) that provide water-based coating compns. with good adhesion  
 following humidity exposure are further improved by providing  
 branching chain extension of the polyurethane. The branched polymers  
 provide improved metallic pigment orientation in coating compns.  
 Branching is provided by the use of chain extending agents selected  
 from polyamines having at least three primary amine groups and  
 polyols having at least three hydroxyl groups. The vinyl monomers  
 are polymd. in the presence of the aqueously dispersed polyurethane.  
 IT 50586-59-9DF, TP-30, polyurethanes  
 (aq. urethane/acrylic resins with branched  
 chain extension and coating compns.)  
 RN 50586-59-9 HCA  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



IC ICM C08J003-05  
 ICS C08J003-03; C08L075-04; C09D175-04  
 INCL 524507000

CC 42-10 (Coatings, Inks, and Related Products)  
IT Fatty acids, uses  
    (C9-11-branched, glycidyl esters, polyurethanes; aq.  
    urethane/acrylic resins with branched chain  
    extension and coating compns.)  
IT Polyurethanes, uses  
    (aq. urethane/acrylic resins with branched  
    chain extension and coating compns.)  
IT Coating materials  
    (aq.; aq. urethane/acrylic resins with branched  
    chain extension and coating compns.)  
IT 106-91-2DP, Glycidyl methacrylate, polyurethanes 4767-03-7DP,  
Dimethylol propionic acid, polyurethanes 5124-30-1DP,  
polyurethanes 25852-37-3P, Butyl acrylate-methyl methacrylate  
copolymer 39423-51-3DP, JEFFAMINE T403, polyurethanes  
50586-59-9DP, TP-30, polyurethanes 79103-62-1DP, Desmodur  
W, polyurethanes 150872-29-0DP, EMPOL 1008, polyurethanes  
219136-15-9P  
    (aq. urethane/acrylic resins with branched  
    chain extension and coating compns.)  
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 23 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 126:239182 HCA Full-text

OREF 126:46281a,46284a

TI Manufacture and uses of photocurable synthetic polymer compositions

IN Saito, Takao; Maeda, Kohei; Ozasa, Naoshi

PA Sanyo Chemical Industries Ltd., Japan

SO Ger. Offen., 31 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 19632122	A1	19970213	DE 1996-19632122	199608 08
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	DE 19632122	B4	20080529		
	JP 10007754	A	19980113	JP 1996-227476	199608 08
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	JP 2881134	B2	19990412		

US 5902837

A

19990511

US 1996-693638

199608  
09

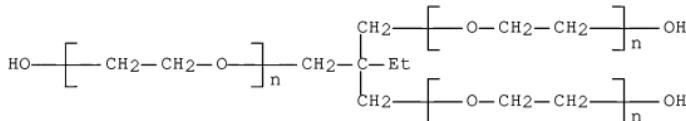
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PRAI JP 1995-225695	A	19950809	<--
JP 1995-351791	A	19951225	<--
JP 1996-129028	A	19960424	<--
JP 1996-129029	A	19960424	<--
JP 1996-131290	A	19960426	<--

AB Rapidly cured title compns. comprise (A) compds. having a ( branched) polymer structure with a polyether-, polyvinyl-, polyester-, polyurethane-, polyamide-, polycarbonate-, and novolak-type main chain contg.  $\geq 5$ , preferably  $\geq 10$  2-propenyoxy groups, and having mol. wt.  $\geq 1000$ , and (B) a cationic photopolymn. initiator, e.g., a triarylsulfonium or diaryliodonium salt. Crosslinked title compns. and photoresists for printed circuit boards, printing inks, paper and metal coatings, optical fiber coatings, and adhesives contg. the compns. are also claimed. In a typical example, epichlorohydrin was polymd. with  $\text{BF}_3\text{-Et}_2\text{O}$ , the polymer was etherified with polyethylene glycol monoallyl ether (prepn. given) in PhMe in the presence of KOH and  $\text{Bu}_4\text{NBr}$ , the reaction mixt. heated to  $170^\circ$  to produce a rearranged, 2-propenyoxy-terminated product which (80 parts) was combined with 20 parts  $\text{MeCH:CHO(CH}_2\text{CH}_2\text{O)}_6\text{H}$  (prepn. given) and 5 parts UVR 6974 (photopolymn. initiator). When coated (20  $\mu\text{m}$ ) on a Cu plate and UV-irradiated, the above compn. required minimal energy input of 20 mJ/cm<sup>2</sup> to give a coating with pencil hardness H and good adhesion to the substrate.

IT 50586-59-9DP, Polyethylene glycol trimethylolpropane ether, allyl ethers rearranged to 2-propenyl ethers, polymers (UV-cured; manuf. and uses of photocurable synthetic polymer compns.)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)

IC ICM C08L029-10  
ICS C08F116-20; C08F216-20; C08J003-28; C09D005-03; C09D011-10;

C09D129-10; C09J129-10; G03F007-027; B05D007-16; C07C043-16  
ICA C08J003-28  
ICI C08L023-26, C08L061-06, C08L067-07, C08L069-00, C08L071-02,  
C08L075-16, C08L077-00  
CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38, 42, 74  
IT 4098-71-9DP, Isophorone diisocyanate, reaction products with  
2-propenyl-terminated polycyanoalkylenes, polymers 9002-89-5DP,  
Poly(vinyl alcohol), allyl ethers rearranged to 2-propenyl ethers,  
polymers with polyethylene glycol mono(2-propenyl) ether  
24969-06-0DP, Polyepichlorohydrin, allyl ethers rearranged to  
2-propenyl ethers, polymers with polyethylene glycol  
mono(2-propenyl) ether 25249-16-5DP, 2-Hydroxyethyl methacrylate  
polymer, allyl ethers rearranged to 2-propenyl ethers, polymers with  
polyethylene glycol mono(2-propenyl) ether 25722-70-7DP,  
Polyglycidic, allyl ethers rearranged to 2-propenyl ethers, polymers  
with polyethylene glycol mono(2-propenyl) ether 25723-16-4DP,  
Polypropylene glycol trimethylolpropane ether, allyl ethers  
rearranged to 2-propenyl ethers, polymers 25791-96-2DP,  
Polypropylene glycol glycerol ether, allyl ethers rearranged to  
2-propenyl ethers, polymers 26022-14-0DP, 2-Hydroxyethyl acrylate  
polymer, allyl ethers rearranged to 2-propenyl ethers, polymers with  
polyethylene glycol mono(2-propenyl) ether 26282-59-7DP, Allyl  
glycidyl ether-Ethylene oxide copolymer, allylic rearrangement  
products, reaction products with isophorone diisocyanate and  
polyethylene glycol 2-propenyl monoether, polymers 26471-62-5DP,  
TDI, reaction products with polyethylene glycol 2-propenyl monoether  
and hydroxyethyl acrylate, polymers 27274-31-3DP, Polyethylene  
glycol monoallyl ether, ethers with polyepichlorohydrin, allylic  
rearrangement products, polymers 27274-31-3DP, polymers with  
2-propenyl ethers of hydroxy-contg. polymers 31694-55-0DP, allyl  
ethers rearranged to 2-propenyl ethers, polymers  
50586-59-9DP, Polyethylene glycol trimethylolpropane ether,  
allyl ethers rearranged to 2-propenyl ethers, polymers  
50977-32-7DP, allyl ethers rearranged to 2-propenyl ethers, polymers  
with polyethylene glycol 2-propenyl monoether 52683-23-5P  
156932-43-3DP, allyl ethers, allylic rearrangement products,  
polymers with polyethylene glycol 2-propenyl monoether  
188405-63-2P, Adipic acid-triethylene glycol-polyethylene glycol  
monoallyl ether copolymer 188405-64-3P 188405-66-5P  
188448-16-0P 188451-04-9DP, allylic rearrangement products,  
polymers with polyethylene glycol 2-propenyl monoether  
(UV-cured; manuf. and uses of photocurable synthetic polymer  
compns.)  
IT 107-05-1, Allyl chloride  
(etherification of ethoxylated polyols;  
manuf. and uses of photocurable synthetic polymer compns.)

IT 56-81-5, 1,2,3-Propanetriol, reactions 126-58-9, Dipentaerythritol  
(ethoxylation and etherification with allyl chloride;  
manuf. and uses of photocurable synthetic polymer compns.)

IT 75-21-8, Oxirane, reactions  
(ethoxylation of glycerol; manuf. and uses of  
photocurable synthetic polymer compns.)

IT 77-99-6  
(ethoxylation of; manuf. and uses of photocurable  
synthetic polymer compns.)

IT 25249-16-5P, 2-Hydroxyethyl methacrylate polymer 26022-14-0P,  
2-Hydroxyethyl acrylate polymer 156932-43-3P, Ethoxylated  
2-hydroxyethyl acrylate  
(prepn. and etherification with allyl chloride; manuf. and uses  
of photocurable synthetic polymer compns.)

IT 75-56-9, reactions  
(propoxylation of glycerol; manuf. and uses of  
photocurable synthetic polymer compns.)

L73 ANSWER 24 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 125:169601 HCA Full-text

OREF 125:31775a,31778a

TI Manufacture of hyperbranched, polyoxyethylene-polyesters and  
thermosetting compositions

IN Soerensen, Kent; Pettersson, Bo; Boogh, Louis; Maansson, Jan-Anders  
Edvin

PA Perstorp Ab, Swed.

SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	-----	---	-----	-----	
PI	WO 9619537	A1	19960627	WO 1995-SE1491	199512 12

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W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES,  
FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU,  
LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, TJ, TM, TT

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR,  
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,  
ML, MR, NE, SN, TD, TG

SE 9404440 A 19960622 SE 1994-4440

199412

			<--
SE 503622	C2	19960724	
AU 9643202	A	19960710	AU 1996-43202
			199512 12
			<--
CA 2206004	A1	19960727	CA 1995-2206004
			199512 12
			<--
CA 2206004	C	20070605	
EP 799279	A1	19971008	EP 1995-941957
			199512 12
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EP 799279	B1	20010328	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE			
JP 10500730	T	19980120	JP 1996-519716
			199512 12
			<--
JP 3117219	B2	20001211	
AT 200098	T	20010415	AT 1995-941957
			199512 12
			<--
ES 2156956	T3	20010801	ES 1995-941957
			199512 12
			<--
TW 396192	B	20000701	TW 1995-84113675
			199512 19
			<--
HK 1003057	A1	20010831	HK 1998-102212
			199803 17
			<--
PRAI SE 1994-4440	A	19941221	<--
WO 1995-SE1491	W	19951212	<--

AB The present invention relates to a thermosetting material wherein the matrix comprises  $\geq 1$  dendritic or hyperbranched macromol. having a chain termination providing  $\geq 1$  primary or secondary reactive site, combined with  $\geq 1$  conventional thermosetting resin or aliph., cycloaliph. or arom. monomeric or polymeric compd. A process for the

manuf. of the title materials and a thermosetting resin compn. providing the matrix or part of the matrix of this material, esp. useful for composites, are also claimed. A typical title polymer was prep'd. by esterification of ethoxylated pentaerythritol with 2,2-dimethylolpropionic acid (I), addn. of a 3d generation to the resulting dendrimer by esterification with I, and etherification of the product with epichlorohydrin. A blend of the resulting hyperbranched macromol. glycidyl ether with a com. bisphenol F-based epoxy resin (Araldite LY 5082) was prep'd. and cured with isophorone diamine catalyst.

IC ICM C08L067-06  
ICS C08J005-04; C08J005-24  
CC 37-3 (Plastics Manufacture and Processing)  
ST polyoxyethylene polyester hyperbranched manuf.; pentaerythritol ethoxylate esterification dimethylolpropionate starburst polymer; dendrimer pentaerythritol ethoxylate esterification dimethylolpropionic acid; epichlorohydrin etherification hyperbranched polyoxyethylene polyester; polyester polyoxyethylene dendritic glycidyl ether manuf.; epoxy resin blend hyperbranched polyoxyethylene polyester  
IT 75-13-8D, Isocyanic acid, esters, polymers  
(blends with epoxidized hyperbranched polyoxyethylene-polyester; manuf. and derivatization of polyoxyethylene-polyesters and thermosetting compns.)  
IT 106-89-8DP, Epichlorohydrin, reaction products with ethoxylated polyols  
(hyperbranched, epoxy resin blend; dendritic, manuf. and derivatization of polyoxyethylene-polyesters and thermosetting compns.)  
IT 34590-77-7P  
(manuf. and esterification with 2,2-dimethylolpropionic acid; dendritic, manuf. and derivatization of polyoxyethylene-polyesters and thermosetting compns.)

L73 ANSWER 25 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 124:30634 HCA Full-text

OREF 124:5895a

TI Preparing grit-reducing aqueous polymer emulsions

IN Jenkins, Richard Duane; Bassett, David Robinson; Sterlen, Ralph Andrew, Jr.; Daniels, Wendy Batts

PA Union Carbide Chemicals and Plastics Technology Corp., USA

SO PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9500565	A1	19950105	WO 1994-US6998	199406 20
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	W: AU, BG, BR, CA, CN, CZ, FI, HU, JP, KR, LK, NO, NZ, PL, RO, RU, SD, SK, UA				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US	5399618	A	19950321	US 1993-83896	199306 28
				<--	
CA	2166195	A1	19950105	CA 1994-2166195	199406 20
				<--	
CA	2166195	C	20001003		
AU	9473152	A	19950117	AU 1994-73152	199406 20
				<--	
AU	702693	B2	19990304		
EP	706535	A1	19960417	EP 1994-923219	199406 20
				<--	
EP	706535	B1	19970625		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP	08512064	T	19961217	JP 1995-503037	199406 20
				<--	
AT	154812	T	19970715	AT 1994-923219	199406 20
				<--	
ES	2105737	T3	19971016	ES 1994-923219	199406 20
				<--	
US	5436292	A	19950725	US 1994-342147	199411 18

US 5476900	A	19951219	US 1995-414005 -->	199503 17
US 5561189	A	19961001	US 1995-521420 -->	199508 30
NO 9505315	A	19960220	NO 1995-5315 -->	199512 27
FI 9506274	A	19960227	FI 1995-6274 -->	199512 27
US 5629375	A	19970513	US 1996-663892 -->	199606 14
PRAI US 1993-83896	A	19930628	-->	
WO 1994-US6998	W	19940620	-->	
US 1994-342147	A3	19941118	-->	
US 1995-414005	A3	19950317	-->	
US 1995-521420	A3	19950830	-->	
AB	The title polymers useful as thickening agents in aq. compns., e.g. latex paints, (no data) which are sol. in, or swelled by, an aq. alk. medium are prep'd. by polymn. of (a) ethylenically unsatd. carboxylic acid 1-99.8, (b) monomers different from (a) 0-98.8, (c) unsatd. macromonomers not of (a) or (b) 0.1-98.9, (d) other unsatd. monomer 0-20, and (e) $\geq$ 1 (meth)acrylates of strong acid or its salt in an amt. to reduce plating and/or grit formation. A mixt. of Et acrylate 150, methacrylic acid 120, the macromonomer resulting from the reaction of m-TMI and 1,3-bis(nonylphenoxy)-2-propanol ethoxylate (20 mol EO) 30, and 2-sulfoethyl methacrylate 3 g was emulsion polymd. to give a potential graft polymer thickener.			
IT	2425-79-8DP, reaction products with nonylphenoxypropanol, ethoxylated (precursor of macromer for manuf. of acrylic polyoxyalkylene)			
RN	2425-79-8 HCA			
CN	Oxirane, 2,2'-[1,4-butanediylbis(oxymethylene)]bis- (CA INDEX NAME)			



IC ICM C08F220-04  
 ICS C08F299-00; C09D007-12  
 CC 35-4 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 37, 42  
 IT 158916-17-7P  
     (precursor of dendritic by divergent approach;  
     precursor of macromer for manuf. of acrylic polyoxyalkylene)  
 IT 2425-79-3DP, reaction products with nonylphenoxypropanol,  
     ethoxylated 25265-27-4P, Poly(phenyl glycidyl ether)  
 156609-83-5P 156647-52-8P 156798-74-2DP, sulfated 156798-74-2P  
     (precursor of macromer for manuf. of acrylic polyoxyalkylene)

L73 ANSWER 26 OF 33 HCA COPYRIGHT 2008 ACS on STN  
 AN 119:181545 HCA Full-text  
 OREF 119:32479a,32482a  
 TI Polyester-type dendritic macromolecules, and their  
     manufacture and use  
 IN Hult, A.; Malmstroem, E.; Johansson, M.; Soerensen, K.  
 PA Perstorp AB, Swed.  
 SO Swed., 20 pp.  
 CODEN: SSXXAY  
 DT Patent  
 LA Swedish  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	SE 468771	B	19930315	SE 1992-564	199202 26
	SE 9200564	A	19930315		<--
	SE 468771	C	19930715		
	WO 9317060	A1	19930902	WO 1993-SE148	199302 24
					<--
W:	AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US				
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU	9336530	A	19930913	AU 1993-36530	199302 24

EP 630389	A1	19941228	EP 1993-905712	<-- 199302 24
				<--
EP 630389	B1	19980429		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07504219	T	19950511	JP 1993-514755	199302 24
				<--
JP 2574201	B2	19970122		
AT 165609	T	19980515	AT 1993-905712	199302 24
				<--
ES 2115762	T3	19980701	ES 1993-905712	199302 24
				<--
CA 2117486	C	19980922	CA 1993-2117486	199302 24
				<--
US 5418301	A	19950523	US 1994-256493	199407 13
				<--

PRAI SE 1992-564 A 19920226 <--  
WO 1993-SE148 A 19930224 <--

AB The macromols., consisting of a central initiator mol. or polymer contg.  $\geq 1$  reactive groups (A), which groups A are bonded with reactive groups (B) of a chain-lengthening monomer to form a 1st, both A an B group-contg. treelike structure that may be further lengthened and branched out from the initiator mol. or polymer by addnl. monomeric chain-lengtheners via bonding to the A and B groups, and, optionally, also further lengthened by reaction with a chain stopper, A and B are hydroxyl A and carboxyl groups, resp., and the chain-lengthening monomer contains a group B and  $\geq 2$  groups A or hydroxyalkyl-substituted A. The macromols. are manufd. by reacting an initiator mol. or polymer contg.  $\geq 1$  hydroxyl groups at 0-280°, preferably 100-250°, with a chain-lengthening monomer contg. a group B and  $\geq 2$  groups A or hydroxyalkyl-substituted A, after which the reaction products may be reacted with a chain stopper. The macromols. are used as components in alkyd resins, satd. and unsatd. polyesters, epoxy resins, polyurethanes, UV-curable binders, dental

materials, lubricants, microlithog. pigments, powd. binders, and amino resins. To 1.0 mol di-trimethylolpropane were added, under flowing Ar and at 120°, 8.0 mol dimethylolpropionic acid and 0.12 mol p-toluenesulfonic acid, and the reaction was carried out at 140° for 2 h, after which 8.0 mol lauric acid were added and the reaction continued for 2 h to give a polyester having viscosity 10 Pa.s at 23°. Addn. of 4.0 and 12.0 mol lauric acid gave viscosity 1037 and 1.5 Pa.s, resp.

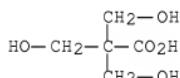
IT 2831-90-5 4767-03-7 10097-02-6

10097-03-7

(chain-lengthening agent, in dendritic polyester  
manuf., for dental materials and paints)

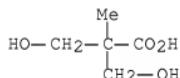
RN 2831-90-5 HCA

CN Propanoic acid, 3-hydroxy-2,2-bis(hydroxymethyl)- (CA INDEX NAME)



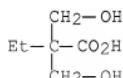
RN 4767-03-7 HCA

CN Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



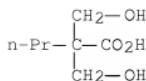
RN 10097-02-6 HCA

CN Butanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



RN 10097-03-7 HCA

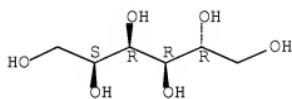
CN Pentanoic acid, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



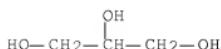
IT 50-70-4DP, D-Glucitol, dendritic polyesters with carboxylic acids 56-81-5DP, 1,2,3-Propanetriol, dendritic polyesters with carboxylic acids 69-65-8DP , Mannitol, dendritic polyesters with carboxylic acids 75-21-8DP, Oxirane, reaction products with alcs., dendritic polyesters with carboxylic acids 75-56-9DP , reaction products with alcs., dendritic polyesters with carboxylic acids 77-85-0DP, Trimethylolethane, dendritic polyesters with carboxylic acids 115-77-5DP, dendritic polyesters with carboxylic acids 126-30-7DP, dendritic polyesters with carboxylic acids 126-58-9DP, Dipentaerythritol, dendritic polyesters with carboxylic acids 22335-61-2DP, Di-trimethylolpropane, dendritic polyesters with carboxylic acids 34541-79-2DP, Di-trimethylolethane, dendritic polyesters with carboxylic acids  
(manuf. of, for dental materials and paints)

RN 50-70-4 HCA  
CN D-Glucitol (CA INDEX NAME)

## Absolute stereochemistry.

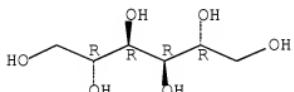


RN 56-81-5 HCA  
CN 1,2,3-Propanetriol (CA INDEX NAME)



RN 69-65-8 HCA  
CN D-Mannitol (CA INDEX NAME)

Absolute stereochemistry.



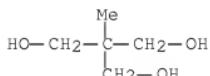
RN 75-21-8 HCA  
CN Oxirane (CA INDEX NAME)



RN 75-56-9 HCA  
CN Oxirane, 2-methyl- (CA INDEX NAME)

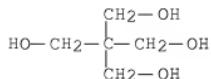


RN 77-85-0 HCA  
CN 1,3-Propanediol, 2-(hydroxymethyl)-2-methyl- (CA INDEX NAME)



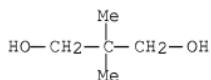
RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



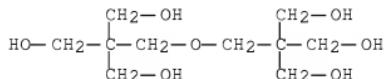
RN 126-30-7 HCA

CN 1,3-Propanediol, 2,2-dimethyl- (CA INDEX NAME)



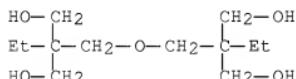
RN 126-58-9 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)- (CA INDEX NAME)



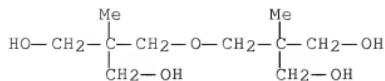
RN 23235-61-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-ethyl- (CA INDEX NAME)



RN 34541-79-2 HCA

CN 1,3-Propanediol, 2,2'-[oxybis(methylene)]bis[2-methyl- (CA INDEX NAME)



IC ICM C08G063-02

ICS C08G063-20

CC 35-5 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 63

ST dendritic polyester; ditrimethylolpropane  
 dimethylolpropionic acid dendritic polyester; lauric acid  
 chain stopper polyester; alkyd resin dendritic polyester;  
 epoxy resin dendritic; urethane polymer dendritic  
 polyester; UV curable polymer dendritic polyester; dental  
 material dendritic polyester; lubricant dendritic  
 polyester; microlithog pigment dendritic polyester; powd  
 binder dendritic polyester; amino resin dendritic  
 polyester

IT Binding materials

Lubricants

(UV-curable, dendritic polyester manuf. for, for dental  
 materials and paints)

IT Aminoplasts

(dendritic polyester manuf. for)

IT Epoxy resins, uses

Urethane polymers, uses  
 (dendritic polyester manuf. for, for dental materials  
 and paints)

IT Alkyd resins

(dendritic polyester manuf. for, for dental materials  
 and paints)

IT Lewis acids

(esterification catalyst, polymn. in presence of, in  
 dendritic polyester manuf. for dental materials and  
 paints)

IT Titanates

(esterification catalysts, polymn. in presence of, in  
 dendritic polyester manuf. for dental materials and  
 paints)

IT Onium compounds

(polymn. catalysts contg., in dendritic polyester  
 manuf. for dental materials and paints)

IT Esterification catalysts

(polymn. in presence of, in dendritic polyester manuf.  
for dental materials and paints)

IT Dendritic polymers  
(polyesters, starburst, manuf. and uses of)

IT Polyesters, preparation  
(starburst dendrimers, manuf. and uses of)

IT 42978-66-5, Tripropylene glycol diacrylate  
(acrylic oligomers UV hardening with, in dendritic  
polyester manuf. for dental materials and paints)

IT 27936-91-0  
(alkyd resins contg. dendritic polyesters and)

IT 473-81-4 2831-90-5 4767-03-7 10097-02-6  
10097-03-7  
(chain-lengthening agent, in dendritic polyester  
manuf., for dental materials and paints)

IT 98-73-7, p-t-Butylbenzoic acid 53632-09-0  
(chain-stopping agent, in dendritic polyester manuf.,  
for dental materials and paints)

IT 65-85-0, Benzoic acid, miscellaneous 79-10-7, 2-Propenoic acid,  
miscellaneous 79-41-4, miscellaneous 124-07-2, Octanoic acid,  
miscellaneous 143-07-7, Dodecanoic acid, miscellaneous 334-48-5,  
Capric acid  
(chain-stopping agent, in dendritic polyester manuf.,  
for dental materials and paints)

IT 25085-98-7, Cyracone UVR 6100  
(cycloaliph. diepoxy resin, in dendritic polyester  
manuf. for dental materials and paints)

IT 75-75-2, Methanesulfonic acid 76-05-1, Trifluoroacetic acid, uses  
104-15-4, p-Toluenesulfonic acid, uses 1493-13-6 5593-70-4,  
Tetrabutyl titanate 7446-70-0, Aluminum chloride (AlCl<sub>3</sub>), uses  
7637-07-2, Boron trifluoride, uses 7646-78-8, Tin tetrachloride,  
uses 7664-38-2, Phosphoric acid, uses 7664-93-9, Sulfuric acid,  
uses 25155-19-5, Naphthalenesulfonic acid  
(esterification catalyst, polymn. in presence of, in  
dendritic polyester manuf. for dental materials and  
paints)

IT 30280-63-8P 32628-22-1DP, soya fatty acid-terminated  
150504-00-0DP, lauric acid- and soya fatty acid-terminated  
(manuf. of dendritic, for dental materials and paints)

IT 50-70-4DP, D-Glucitol, dendritic polyesters with  
carboxylic acids 56-81-5DP, 1,2,3-Propanetriol,  
dendritic polyesters with carboxylic acids 69-65-8DP  
, Mannitol, dendritic polyesters with carboxylic acids  
75-21-8DP, Oxirane, reaction products with alcs.,  
dendritic polyesters with carboxylic acids 75-56-9DP  
, reaction products with alcs., dendritic polyesters with  
carboxylic acids 77-85-0DP, Trimethylethane,

dendritic polyesters with carboxylic acids 97-30-3DP,  
dendritic polyesters with carboxylic acids  
115-77-5DP, dendritic polyesters with carboxylic  
acids 126-30-7DP, dendritic polyesters with  
carboxylic acids 126-58-9DP, Dipentaerythritol,  
dendritic polyesters with carboxylic acids 4744-47-2DP,  
dendritic polyesters with carboxylic acids  
23235-61-2DP, Di-trimethylolpropane, dendritic  
polyesters with carboxylic acids 26249-20-7DP, Butyleneoxide,  
reaction products with alcs., dendritic polyesters with  
carboxylic acids 34541-79-2DP, Di-trimethylolethane,  
dendritic polyesters with carboxylic acids 52624-57-4DP,  
dendritic polyesters with carboxylic acids

(manuf. of, for dental materials and paints)

IT 94-36-0, Benzoyl peroxide, uses 121-69-7, uses 123-31-9,  
Hydroquinone, uses 136-52-7, Cobalt octoate 614-45-9, tert-Butyl  
perbenzoate 947-19-3, Irgacure 184  
(polymn. catalysts contg., in dendritic polyester  
manuf. for dental materials and paints)

IT 7440-31-5, Tin, uses 7440-66-6, Zinc, uses  
(powd., esterification catalyst, polymn. in presence of, in  
dendritic polyester manuf. for dental materials and  
paints)

L73 ANSWER 27 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 115:281276 HCA Full-text

OREF 115:47801a,47804a

TI Preparing a dispersant/viscosity index improver modified  
star polymer for lubricant additive

IN Van Zon, Arie; Klaver, Gerarda Jacoba

PA Shell Internationale Research Maatschappij B. V., Neth.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI EP 449374 A2 19911002 EP 1991-200679

199103

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EP 449374 A3 19930811

EP 449374 B1 19951220

R: BE, DE, ES, FR, GB, IT, NL

US 5147570 A 19920915 US 1991-672995

				199103
				21
ES 2080883	T3	19960216	ES 1991-200679	199103
				25
KR 172450	B1	19990320	KR 1991-4814	199103
				27
CA 2039431	A1	19911001	CA 1991-2039431	199103
				28
AU 9173965	A	19911003	AU 1991-73965	199103
				28
AU 637890	B2	19930610	AU 1991-101910	199103
CN 1055758	A	19911030		28
CN 1029786	C	19950920		
BR 9101263	A	19911105	BR 1991-1263	199103
				28
JP 05287290	A	19931102	JP 1991-64933	199103
				28
JP 2905611	B2	19990614		
RU 2041238	C1	19950809	RU 1991-4895092	199103
				28
PRAI GB 1990-7267	A	19900330	<--	

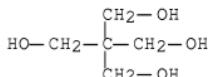
AB The title additives are prep'd. by reaction of  $\alpha,\beta$ -unsatd. carboxylic acid (deriv.) with a hydrogenated star vinyl arom. copolymer to give an activated star polymer (ASP), reaction of  $\geq 1$  RO(AO)<sub>n</sub>H (R = C4-20 alkyl; A = C2H4 or C3H6; n = 0-5) with ASP, optionally a long chain alkane-substituted carboxylic acid (deriv.), Cl-8 amine and/or alkane polyol, or polyol polyamine, optionally esterifying residual acid groups. Shellvis 200 was heated at 133° for 18 h with maleic anhydride to give ASP (2% maleated), heated with a mol. equiv. of

Dobanol 91-5 (ethoxylate) at 150° for 1 h, and 170° for 3 h to give a viscosity index improver (13.6% star polymer, 0.014 mmol./g acid) for HVI 60 oil (flash point 200°).

IT 115-77-5D, Pentaerythritol, ester with ethoxylated maleated hydrogenated rubber  
(for viscosity index improve and lube oil additive)

RN 115-77-5 HCA

CN 1,3-Propanediol, 2,2-bis(hydroxymethyl)- (CA INDEX NAME)



IC ICM C08F008-00

ICS C10M145-18; C10M149-14

CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 51

IT Lubricating oil additives  
(viscosity index improver and, alkoxylated modified hydrogenated star polymer, prepн. of)

IT 115-77-5D, Pentaerythritol, ester with ethoxylated maleated hydrogenated rubber  
(for viscosity index improve and lube oil additive)

L73 ANSWER 28 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 115:184163 HCA Full-text

OREF 115:31475a,31478a

TI Manufacture of vinyl polymer emulsions using pre-emulsified monomers

IN Barkai, Zsuzsanna; Maschek, Ottmar; Jaky, Geza; Varadi, Tibor;  
Szabo, Lajos; Santha, Laszlo; Szegedi, Lakos

PA Budalakk Festek es Mugyantagyar, Hung.

SO Hung. Teljes, 16 pp.

CODEN: HUXXBU

DT Patent

LA Hungarian

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI HU 54181	A2	19910128	HU 1988-6454	
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198812

16

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HU 205150

B 19920330

PRAI HU 1988-6454

19881216 &lt;--

AB Polymer emulsions, useful for paints with good freeze-thaw stability, are prep'd. by polymg. vinyl monomers which are pre-emulsified in water using anionic and nonionic surfactants and neutralized adducts of maleic anhydride-styrene copolymer (I; mol. wt. 1,400-2,500; acid no. 270-480) and/or esters (mol. wt. 1,700-2,500; acid no. 210-230) of I and C1-20 alcs. and ethoxylated aliph. polyol fatty esters, polyethylene glycol (II) fatty esters, ethoxylated fatty alcs., and/or ethoxylated alkylphenols as emulsifiers. Thus, a mixt. contg. 20 parts I and 20 parts I Et ester was treated with 70 parts II (d.p. 20) stearate at 160° until the acid no. was 65, cooled to 90°, and mixed with 440 parts water and 10 parts 28% NH4OH soln. at 135° to give an adduct (III) soln. A soln. contg. water 180, dioctyl sodiosulfosuccinate (IV) 1, and K2S2O8 0.25 part at 80° was added during 3 h to an emulsion of water 340, IV 1, ethoxylated (23 mol) nonylphenol 11.5, K2S2O8 1.8, borax 2, acrylamide 9, vinyl acetate 330, Versatic acid vinyl ester 110, and III soln. 40 parts, and the mixt. was stirred 2 h at 80°, cooled to 40°, and neutralized with 28% NH4OH soln. to give a polymer (particle size 50 µm) emulsion. A paint prep'd. from the emulsion showed freeze-thaw resistance (8 h at -20° and 16 h at +20°) >17 cycles, vs. 1 without the III soln.

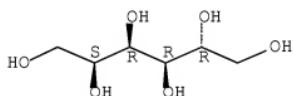
IT 50-70-4D, Sorbitol, esters with tall-oil fatty acids, ethoxylated, esters with maleic anhydride-styrene copolymer, ammonium salts

(emulsifiers, for polymn. of vinyl polymers)

RN 50-70-4 HCA

CN D-Glucitol (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C08F002-20

CC 35-4 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 37, 42

IT Fatty acids, esters  
(branched, vinyl esters, polymers, with  
acrylamide and vinyl acetate, manuf. of, emulsifiers for)  
IT 50-70-4D, Sorbitol, esters with tall-oil fatty acids,

ethoxylated, esters with maleic anhydride-styrene copolymer,  
ammonium salts 9002-92-0D, Polyethylene glycol lauryl ether,  
reaction products with maleic anhydride-styrene copolymer stearate  
and polyethoxylated sorbitol tall-oil fatty ester, ammonium salts  
9011-13-6D, Maleic anhydride-styrene copolymer, esters with  
polyethylene glycol derivs., ammonium salts 25322-68-3D, maleic  
anhydride-styrene copolymer derivs., ammonium salts 52503-38-5D,  
reaction products with polyethoxylated sorbitol tall-oil fatty  
esters and polyethylene glycol lauryl ether, ammonium salts  
136218-51-4 136218-52-5 136772-70-8  
(emulsifiers, for polymn. of vinyl polymers)

L73 ANSWER 29 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 110:175182 HCA Full-text

OREF 110:29059a, 29062a

TI Design of highly pigment-dispersible coatings based on acid/base  
concept

AU Kobayashi, T.; Tsutsui, K.; Hirasawa, Y.; Ikeda, S.

CS Tech. Cent., Nippon Paint Co., Ltd., Osaka, Japan

SO Advances in Organic Coatings Science and Technology Series (1988), 10(Int. Conf. Org. Coat. Sci. Technol., 12th, 1986), 114-20

CODEN: AOCSDV; ISSN: 0271-1885

DT Journal

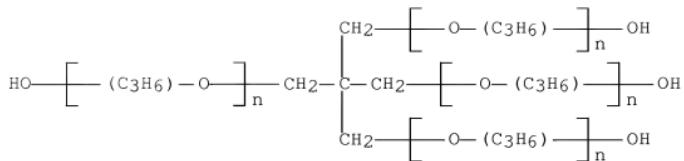
LA English

AB Highly dispersed states of pigments could be attained by adjusting  
acid-base amts. of resins with those of pigments, which were detd. by  
non-aq. titrn. Pigment-dispersing resins were designed to be  
compatible with binders of paints, on the basis of the solv.  
parameter concept. Pigment-dispersing resins with viscosities low  
enough to formulate non-solvent paints could be obtained by the acid-  
base modification of anionically polymd. star -shaped polyether-  
polyols. A non-solvent type of paste was developed.

IT 9051-49-4, Pentaerythritol-propylene oxide copolymer  
(coatings, design of, with highly dispersed states of pigments,  
acid-base concept in)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-,  
ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX  
NAME)



CC 42-10 (Coatings, Inks, and Related Products)  
 ST pigment dispersion coating acid base; polyether polyol  
 coating pigment dispersion  
 IT 9051-49-4, Pentaerythritol-propylene oxide copolymer  
 (coatings, design of, with highly dispersed states of pigments,  
 acid-base concept in)

L73 ANSWER 30 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 98:216841 HCA Full-text

OREF 98:32985a,32988a

TI Electric cables

PA Showa Electric Wire and Cable Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58023107	A	19830210	JP 1981-120964	198108 01

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PRAI JP 1981-120964 19810801 <--

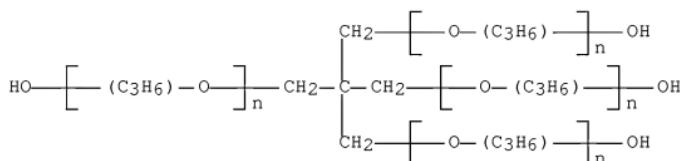
AB Elec. cables having improved water-treeing resistance contain a semiconductive layer from ethylene-vinyl acetate copolymer (I) [24937-78-8] and 1-25 phr polyethylene glycol pentaerythritol ether (4:1) (II) [42503-45-7] or polypropylene glycol pentaerythritol ether (4:1) [9051-49-4]. For example, a semiconductive layer was formed from I 100, carbon black 70, dicumyl peroxide 0.2, and II 20 parts.

IT 9051-49-4

(elec. cables contg. ethylene-vinyl acetate copolymer and, in semiconductive layers, with improved water treeing resistance)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-,  
ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX  
NAME)



IC H01B009-02; H01B001-24

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

ST elec cable treeing resistance; ethylene copolymer semiconductive  
elec cable; alkoxylated pentaerythritol semiconductive  
elec cable

IT Electric breakdown

(dendritic, in elec. cables, prevention of, by  
semicond. polyoxyalkylene ether layers)

IT 9051-49-4 42503-45-7

(elec. cables contg. ethylene-vinyl acetate copolymer and, in  
semiconductive layers, with improved water treeing resistance)

L73 ANSWER 31 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 90:153201 HCA Full-text

OREF 90:24371a,24374a

TI Polyurethane foams

IN Watanabe, Nobuyuki; Okawara, Hiroshi; Nishimura, Akira; Takai,  
Makoto; Onoda, Koji

PA Miyoshi Oil and Fat Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

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PI JP 53146798 A 19781220 JP 1977-61739

197705

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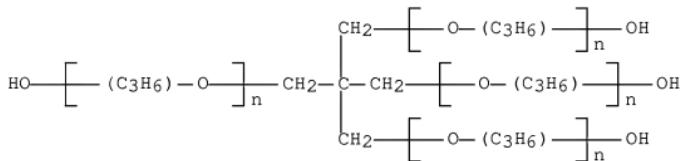
JP 60031205 B 19850720  
 PRAI JP 1977-61739 A 19770528 <--

AB Heat-resistant polyurethane foams, with increased tensile strength, were prepd. by esterifying a mixt. of linear fatty acid RCH<sub>2</sub>CO<sub>2</sub>H (I), where R is C<sub>8</sub>-20 alkyl group, and a branched fatty acid R<sub>1</sub>CHR<sub>2</sub>CO<sub>2</sub>H (II), where R<sub>1</sub> is C<sub>4</sub>-19 alkyl group and R<sub>2</sub> is C<sub>1</sub>-10 alkyl group, with a polyhydric alc. and foaming compns. contg. the ester and an isocyanate. Thus, 100 parts of a mixt. of I (total C no. is 12-15) and II (R<sub>1</sub> is C<sub>5</sub>-12 alkyl and R<sub>2</sub> is C<sub>1</sub>-6 alkyl) at 35:65 wt. ratio was esterified with 2726 parts pentaerythritol-propylene oxide adduct to give an ester (III). A blend contg. III 100, triethanolamine 3.0, H<sub>2</sub>O 3, triethylenediamine 0.125, Et<sub>3</sub>N 0.7, a silicone foaming regulator 2.0, and TDI 37 parts was foamed to give a foam with tensile strength 1.54 kg/cm<sup>2</sup> and heat distortion temp. 131°, compared with 1.36 kg/cm<sup>2</sup> and 124°, resp., for a foam obtained from a similar compn. contg. glycerol-ethylene oxide adduct instead of III.

IT 9051-49-4D, esters with linear-branched fatty acids, polymers with TDI (cellular, heat-resistant, with increased tensile strength)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



IC C08G018-32A  
 CC 37-3 (Plastics Fabrication and Uses)  
 IT Fatty acids, esters  
     (linear-branched, esters with polyhydric alcs., polymers with TDI, cellular, heat-resistant)  
 IT 9051-49-4D, esters with linear-branched fatty acids, polymers with TDI 26471-62-5D, polymers with esters of linear-branched fatty acids with polyhydric

alcls. 61710-63-2D, esters with linear-branched fatty acids, polymers with TDI  
(cellular, heat-resistant, with increased tensile strength)

L73 ANSWER 32 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 88:74887 HCA Full-text

OREF 88:11831a,11834a

TI Highly branched polyether polyols of high molecular weight

IN Helfert, Herbert; Langdon, William Keith; Davis, Pauls

PA BASF Wyandotte Corp., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4061684	A	19771206	US 1976-736939	197610 29
CA 1100688		A1	19810505	CA 1977-289789	197710 28

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PRAI US 1976-736939 A 19761029 <--

AB The title compds. are prep'd. by coupling an alkoxylated polyglycerol with diethylene glycol bis(benzenesulfonate), and are useful as hydrophilic water-swellable gels. Thus, a highly-branched polyglycerol polyol contg. <1% glycerol (I) units was prep'd. by treating a polyglycerol (5.4 I units/mol.) with a mixt. of 85% ethylene oxide and 15% propylene oxide in 3 stages, using in each stage a ratio of 6 parts alkylene oxide/1 part polyglycerol. The polyol, which had viscosity 123.7 SUS (15 wt.% soln., 37.8°) was refluxed in N for 6 h, cooled to 100°, and treated with 6.5 g of the bis(benzenesulfonate) and 50 mL benzene. The soln. was stirred 90 s and evapd. to form a viscous resinous product, which exhibited (as a 5 wt.% soln.) Brookfield viscosity (20°, Spindle No. 2) 112 and 96 cP at 2.5 and 100 rpm, resp.

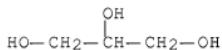
IT 9082-00-2DP, reaction products with diethylene glycol bis(benzenesulfonate)  
(gels, highly branched, manuf. of)

RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5  
CMF C3 H8 O3



CM 2

CRN 9003-11-6  
CMF (C3 H6 O . C2 H4 O)x  
CCI PMS

CM 3

CRN 75-56-9  
CMF C3 H6 O



CM 4

CRN 75-21-8  
CMF C2 H4 O



IC C07C043-00  
INCL 260615000B

CC 36-3 (Plastics Manufacture and Processing)

ST polyether polyol glycol benzenesulfonate; coupler ethylene

glycol bisbenzenesulfonate  
IT 9082-00-2DP, reaction products with diethylene glycol  
bis(benzenesulfonate) 65540-85-4DP, reaction products with  
ethylene oxide-glycerol-propylene oxide polymers  
(gels, highly branched, manuf. of)

L73 ANSWER 33 OF 33 HCA COPYRIGHT 2008 ACS on STN

AN 64:105421 HCA Full-text

OREF 64:19925h,19926a-c

TI Expanded polyurethans

PA Imperial Chemical Industries Ltd.

SO 14 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	BE 663892		19651116	BE	<--

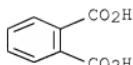
PRAI GB 19640513 <--

AB The title products with improved mech. properties at elevated temp., can be manufd. by treating a branched polyester (I) of low OH no. with a polyisocyanate in the presence of an inert liquid of low b.p. (20-80% based on I). The acid component of I should contain  $\geq 80$  mole % phthalic acid or its derivs. The branching of I is assured by using polyols, such as glycerol, trimethylolpropane, hexanetriol, pentaerythritol, or Me glucoside. To avoid cross-linking, phthalic anhydride (II) is treated with a polyol and an alkylene oxide in the presence of an amine catalyst. In order to obtain rigid foams, the mol. wt. of I should be 500-2000. The viscosity of the reaction mixt. can be lowered by addn. to I of a polyether having  $\geq 3$  OH groups/mol. Thus, I was prep'd. by refluxing II 1776, pentaerythritol 408, N,N-dimethylbenzylamine 6, and dioxane 600 parts in a N atm. Propylene oxide (III) (768 parts) was added to this mixt. and, after 16 hrs., an addnl. portion of III (50 parts) was added. After distn. of volatiles, a hard glassy I was obtained (OH no. 209 mg. KOH/g.; acid no. 6.9 mg. KOH/g.). To this I, 50 wt. % (based on I) oxypropyleneated trimethylolpropane (IV) (OH no. 530) and 60 wt. % (based on I) FCC13 are added. To 28 parts of this mixt., siloxane-oxyalkylene copolymer 0.2, diphenylmethane diisocyanate 17, and N,N-dimethylcyclohexylamine 0.07 part were added, and a rigid foam (sp. gr. 32 g./dm.3) softening under pressure at 210-30° (compared to 160° for a similar foam derived from IV) was obtained.

IT 88-99-3, Phthalic acid

(polyesters, branched, reaction products with propylene oxide, urethan polymer foams from polyethers and)

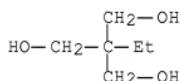
RN 88-99-3 HCA  
CN 1,2-Benzenedicarboxylic acid (CA INDEX NAME)



IT 75-56-9, Propylene oxide  
(reaction products with branched phthalate polyesters and with polyols, urethan polymer foams from)  
RN 75-56-9 HCA  
CN Oxirane, 2-methyl- (CA INDEX NAME)



IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
(urethan polymer foams from)  
RN 77-99-6 HCA  
CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



CC 48 (Plastics Technology)  
IT Ethers  
(urethan polymer foams from branched  
polyester-propylene oxide reaction products and branched)  
IT 88-99-3, Phthalic acid  
(polyesters, branched, reaction products with propylene oxide,  
urethan polymer foams from polyethers and)  
IT 102-71-6, Ethanol, 2,2',2''-nitrilotri-  
(reaction products of, with propylene oxide, urethan  
polymer foams from branched phthalate  
polyesterpropylene oxide reaction products and)  
IT 75-56-9, Propylene oxide

(reaction products with branched phthalate polyesters and with  
polyols, urethan polymer foams from)  
IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl-  
(urethan polymer foams from)

=> D L74 1-10 BIB ABS HITSTR HITIND

L74 ANSWER 1 OF 10 HCA COPYRIGHT 2008 ACS on STN  
AN 139:397041 HCA Full-text

TI Coating compositions with storage stability at low temperature for  
formation of electrically insulated films

IN Kuroki, Masakatsu; Hanahata, Hiroyuki

PA Asahi Kasei Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2003336009	A	20031128	JP 2002-146100	200205 21

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PRAI JP 2002-146100

20020521 <--

AB Title compns. contain (a) SiO<sub>2</sub> precursors selected from 1-6  
functional alkoxy silanes as R<sub>1</sub>nSi(OR<sub>2</sub>)<sub>4-n</sub> (R<sub>1</sub>, R<sub>2</sub> = H or hydrocarbyl;  
n = 0-3) and/or R<sub>3</sub>m(OR<sub>4</sub>)<sub>3-m</sub>R<sub>7</sub>pSi(OR<sub>5</sub>)<sub>3-q</sub>R<sub>6</sub>q [R<sub>3</sub>-R<sub>6</sub> = H or  
hydrocarbyl; R<sub>7</sub> = O or (CH<sub>2</sub>)<sub>r</sub> with r = 1-6; m, q = 0-2; p = 0-1],  
their hydrolyzates, and polycondensates and (b) org. polymers contg.  
≥10% branched polymers contg. ≥3 C/O bond connecting groups  
connecting ≥3 block copolymers based from ≥2 components. An aq.  
compn. contg. Si(OEt)<sub>4</sub>, MeSi(OEt)<sub>3</sub>, (OEt)<sub>3</sub>SiCH<sub>2</sub>CH<sub>2</sub>Si(OEt)<sub>3</sub>, acids,  
and ethylene oxide-propylene oxide block copolymer glycerol ether was  
reacted at 50° for 6 h, concd., and dild. to form a soln. showing  
storage stability at -20°, which was spin-coated on a Si wafer,  
heated, and calcined at 400° for 1 h to form a 0.95-μ porous SiO<sub>2</sub>  
film with dielec. const. of 2.23.

IT 107498-00-0, Ethylene oxide-propylene oxide block  
copolymer glycerol ether

(branched polyether block copolymer-contg.

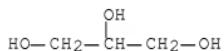
siloxane coatings with low-temp. stability for manuf. of porous  
thin SiO<sub>2</sub> films)

RN 107498-00-0 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with  
1,2,3-propanetriol (3:1), block (CA INDEX NAME)

CM 1

CRN 56-81-5  
CMF C3 H8 O3



CM 2

CRN 106392-12-5  
CMF (C3 H6 O . C2 H4 O)x  
CCI PMS

CM 3

CRN 75-56-9  
CMF C3 H6 O



CM 4

CRN 75-21-8  
CMF C2 H4 O



IC ICM C09D183-04

ICS C01B033-12; C09D005-25; C09D183-02; C09D183-14; C09D201-00;  
H01L021-316

CC 42-10 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 38

IT Polysiloxanes, uses  
(SiO<sub>2</sub> precursor; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT Polyoxalkylenes, uses  
(block, triblock; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT Coating materials  
(storage-stable; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT 512195-55-0P  
(SiO<sub>2</sub> precursor; branched polyether block  
copolymer-contg. siloxane coatings with low-temp.  
stability for manuf. of porous thin SiO<sub>2</sub> films)

IT 107498-00-0, Ethylene oxide-propylene oxide block  
copolymer glycerol ether  
(branched polyether block copolymer-contg.  
siloxane coatings with low-temp. stability for manuf. of porous  
thin SiO<sub>2</sub> films)

IT 7631-86-9P, Silica, uses  
(film; branched polyether block copolymer  
-contg. siloxane coatings with low-temp. stability for manuf. of  
porous thin SiO<sub>2</sub> films)

L74 ANSWER 2 OF 10 HCA COPYRIGHT 2008 ACS on STN  
AN 139:150310 HCA Full-text

TI Study of physicochemical properties of branched ethylene  
oxide-propylene oxide random copolymers

AU Koshelev, V. N.; Vakhrushev, L. P.; Belenko, E. V.; Polishchuchenko,  
V. P.; Ostryagin, A. I.

CS OAO "Purneftegazgeologiya", OAO NPO "Burenie", Russia

SO Izvestiya Vysshikh Uchebnykh Zavedenii, Severo-Kavkazskii Region,  
Estestvennye Nauki (2001), (1), 56-60

CODEN: IVUNE6; ISSN: 1026-2237

PB Rostovskii Gosuniversitet

DT Journal

LA Russian

AB Effect of mol. wt. and degree of branching on foam forming, surface  
active, and spectral characteristics of ethylene oxide-propylene  
oxide random copolymers was investigated. Ethylene oxide-propylene  
oxide copolymers prep'd. by anionic polymn. using

tetraethanolethylenediamine, glycerol, and ethylene glycol formed  
tetra- and tri-armed, and linear copolymers, resp.

IT 9082-00-2P, Ethylene oxide-propylene oxide copolymer ether  
with glycerol

(properties of branched ethylene oxide-propylene oxide random  
copolymers)

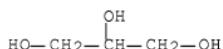
RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with  
1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5

CMF C3 H8 O3



CM 2

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 3

CRN 75-56-9

CMF C3 H6 O



CM 4

CRN 75-21-8

CMF C2 H4 O



CC 37-5 (Plastics Manufacture and Processing)  
Section cross-reference(s): 46

IT Polymer chains  
(branching; properties of branched ethylene oxide-propylene oxide random copolymers)

IT 9003-11-6, Ethylene oxide-propylene oxide copolymer  
(properties of branched ethylene oxide-propylene oxide random copolymers)

IT 9082-00-2P, Ethylene oxide-propylene oxide copolymer ether  
with glycerol 56449-04-8P  
(properties of branched ethylene oxide-propylene oxide random copolymers)

L74 ANSWER 3 OF 10 HCA COPYRIGHT 2008 ACS on STN  
AN 138:354410 HCA Full-text

TI Structured hydrogels based on poly(ethylene oxide) multi-arm stars with hyperbranched polyglycerol cores

AU Knischka, Ralf; Lutz, Pierre J.; Sunder, Alexander; Frey, Holger  
CS Inst. fuer Makromol. Chem. und Freiburger Materialforschungszentrum  
FMF, Albert-Ludwigs-Univ., Freiburg, D-79104, Germany

SO Polymeric Materials Science and Engineering (2001), 84,  
945-946  
CODEN: PMSEDG; ISSN: 0743-0515

PB American Chemical Society  
DT Journal  
LA English

AB Poly(ethylene oxide) (PEO) hydrogels were prepd. by free radical polymn. of linear  $\alpha,\omega$ -dimethacrylate PEO macromonomers with PEO multi-arm star polymers partially modified with methacrylate groups. The PEO stars were prepd. by anionic polymn. of oxirane starting from a hyperbranched poly(glycerol-*b*-propylene oxide) core. The resulting networks were studied as gels swollen to equil. in water. In each case, the amt. of extractable material, the degree of equil. swelling, and the uniaxial compression modulus were detd. When the amt. of the PEO star is kept low (around 10% with respect to the linear macromonomer) the properties of the resulting networks are close to those of hydrogels obtained by homopolymn. of bifunctional PEO macromonomers. However, the residual hydroxyl functions in the network, originating from the PEO stars, allow yet further modifications of the properties of the hydrogels.

IT 141954-63-4DP, Glycerol-propylene oxide block copolymer,

methacrylated

(core; prepn. and swelling and elasticity of hydrogels of poly(ethylene oxide) multi-arm stars with hyperbranched polyglycerol cores)

RN 141954-63-4 HCA

CN 1,2,3-Propanetriol, polymer with 2-methyloxirane, block (CA INDEX NAME)

CM 1

CRN 75-56-9

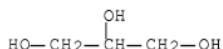
CMF C3 H6 O



CM 2

CRN 56-81-5

CMF C3 H8 O3



CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 36

ST polyethylene oxide dimethacrylate polymer star  
polyglycerol core structure hydrogel; swelling compression modulus  
PEO hyperbranched polyglycerol hydrogel

IT Polymers, preparation  
(star-branched; prepn. and swelling and  
elasticity of hydrogels of poly(ethylene oxide) multi-arm stars  
with hyperbranched polyglycerol cores)

IT 141954-63-4DP, Glycerol-propylene oxide block copolymer,  
methacrylated  
(core; prepn. and swelling and elasticity of hydrogels of poly(ethylene oxide) multi-arm stars with hyperbranched polyglycerol cores)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L74 ANSWER 4 OF 10 HCA COPYRIGHT 2008 ACS on STN  
AN 132:152288 HCA Full-text  
TI Functional Poly(ethylene oxide) Multiarm Star Polymers: Core-First Synthesis Using Hyperbranched Polyglycerol Initiators  
AU Knischka, Ralf; Lutz, Pierre J.; Sunder, Alexander; Muelhaupt, Rolf; Frey, Holger  
CS Institut Charles Sadron (CNRS), Strasbourg, F-67083, Fr.  
SO Macromolecules (2000), 33(2), 315-320  
CODEN: MAMOBX; ISSN: 0024-9297  
PB American Chemical Society  
DT Journal  
LA English  
AB Hyperbranched polyglycerol as well as polyglycerol modified with short apolar oligo(propylene oxide) segments ( $D_Pn = 23-52$ ;  $M_w/M_n = 1.2-1.4$ ) was deprotonated with diphenylmethylpotassium and used as polyfunctional initiators for the anionic polymn. of ethylene oxide to prep. poly(ethylene oxide) (PEO) multiarm star polymers. In the case of unmodified polyglycerol, after metalation, aggregation occurred, preventing efficient initiation and propagation. Using the apolarly modified polyglycerols with terminal oligo(propylene oxide) segments, hydroxy-functional PEO multiarm star polymers with  $M_n$  values in the range 34,000-95,000 g/mol, arm nos. in the range 26-55, and narrow polydispersity ( $M_w/M_n < 1.5$ ) were obtained in a core-first strategy.  $^1H$  and  $^{13}C$  NMR measurements evidenced complete conversion of all end groups of the propylene oxide-capped end groups of the initiator. Reinitiation of the multiarm PEO stars by deprotonation was possible and afforded star polymers with considerably larger mol. wts. ( $M_n = 180\,000$  g/mol) and identical functionality. The thermal properties of the stars (DSC) were found to depend strongly on the arm length. The novel multiarm star architectures prep'd. consist of polyether structures only and are thus of interest for biomedical applications, e.g., in hydrogels.  
IT 141954-63-4, Glycerol-propylene oxide block copolymer (hyperbranched, initiator; functional poly(ethylene oxide) multiarm star polymers prep'd. by core-first synthesis using hyperbranched polyglycerol-based initiators)  
RN 141954-63-4 HCA  
CN 1,2,3-Propanetriol, polymer with 2-methyloxirane, block (CA INDEX NAME)

CM 1

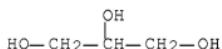
CRN 75-56-9

CMF C3 H6 O



CM 2

CRN 56-81-5  
CMF C3 H8 O3



IT 118086-72-9P, Ethylene oxide-glycerol block copolymer 257955-05-8P, Ethylene oxide-glycerol-propylene oxide block copolymer (multiarm star-branched; functional poly(ethylene oxide) multiarm star polymers prep'd. by core-first synthesis using hyperbranched polyglycerol-based initiators)

RN 118086-72-9 HCA

CN 1,2,3-Propanetriol, polymer with oxirane, block (9CI) (CA INDEX NAME)

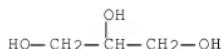
CM 1

CRN 75-21-8  
CMF C2 H4 O



CM 2

CRN 56-81-5  
CMF C3 H8 O3



RN 257955-05-8 HCA  
CN 1,2,3-Propanetriol, polymer with methyloxirane and oxirane, block  
(9CI) (CA INDEX NAME)

CM 1

CRN 75-56-9  
CMF C3 H6 O



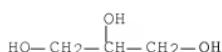
CM 2

CRN 75-21-8  
CMF C2 H4 O



CM 3

CRN 56-81-5  
CMF C3 H8 O3



CC 35-7 (Chemistry of Synthetic High Polymers)  
ST ethylene oxide multiarm star block copolymer  
prepns; polyglycerol initiator ethylene oxide multiarm star  
block copolymer  
IT Polymerization  
(anionic, ring-opening; functional poly(ethylene oxide) multiarm  
star polymers prepnd. by core-first synthesis  
using hyperbranched polyglycerol-based initiators)  
IT Polyoxalkylenes, preparation  
(multiarm star-branched; functional poly(ethylene oxide) multiarm  
star polymers prepnd. by core-first synthesis  
using hyperbranched polyglycerol-based initiators)  
IT Polymers, preparation  
(star-branched; functional poly(ethylene oxide)  
multiarm star polymers prepnd. by  
core-first synthesis using hyperbranched polyglycerol-based  
initiators)  
IT 25618-55-7, Glycerol homopolymer 141954-63-4,  
Glycerol-propylene oxide block copolymer  
(hyperbranched, initiator; functional poly(ethylene oxide)  
multiarm star polymers prepnd. by core-first  
synthesis using hyperbranched polyglycerol-based initiators)  
IT 118086-72-9P, Ethylene oxide-glycerol block  
copolymer 257955-05-8P, Ethylene  
oxide-glycerol-propylene oxide block copolymer  
(multiarm star-branched; functional  
poly(ethylene oxide) multiarm star polymers  
prepnd. by core-first synthesis using hyperbranched  
polyglycerol-based initiators)  
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

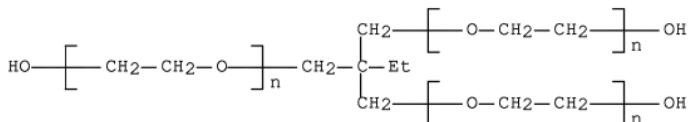
L74 ANSWER 5 OF 10 HCA COPYRIGHT 2008 ACS on STN  
AN 131:5650 HCA Full-text  
TI Synthesis of well-defined C60 end-capped poly(ethylene oxide) stars  
and linear analogs  
AU Logan, Jennifer L.; Duran, Randolph S.; Taton, Daniel; Angot,  
Stephanie; Gnanou, Yves  
CS Department of Chemistry, Rollins College, Winter Park, FL, USA  
SO Polymer Preprints (American Chemical Society, Division of Polymer  
Chemistry) (1999), 40(1), 125-126  
CODEN: ACPPAY; ISSN: 0032-3934  
PB American Chemical Society, Division of Polymer Chemistry  
DT Journal

LA English  
AB The synthesis of star polymers is of interest as such structures form the most elementary way to arrange the subchains of a branched polymer, with each star contg. only one branching point. These architectures represent useful models for the exptl. evaluation of theories concerning the soln. properties and rheol. behavior of branched polymers. Poly(ethylene oxide), in particular, is of interest as the hydroxyl end-groups can be replaced with C60, thereby introducing amphiphilic behavior. We have demonstrated the synthesis of new fullerene-contg. star polymers. These materials may have interest as novel amphiphiles and in their ability to self-organize in the bulk.

IT 50586-59-9P  
(synthesis of well-defined poly(ethylene oxide) stars and C60-end-capped linear analogs)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



CC 35-7 (Chemistry of Synthetic High Polymers)

ST polyethylene glycol star polymer fullerene terminated

IT Polymers, preparation  
(star-branched; synthesis of well-defined poly(ethylene oxide) stars and C60-end-capped linear analogs)  
IT 42503-45-7P, Polyethylene glycol ether with pentaerythritol (4:1)  
50586-59-9P 82973-76-0P 124303-73-7P 225531-48-6P  
225531-49-7P 225531-50-0P 225531-51-1P 225531-52-2P  
(synthesis of well-defined poly(ethylene oxide) stars and C60-end-capped linear analogs)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L74 ANSWER 6 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 127:221050 HCA Full-text

OREF 127:43089a, 43092a

TI Towards the easy synthesis of poly(ethylene oxide)

dendrimers

AU Bera, Tushar Kanti; Taton, Daniel; Gnanou, Yves  
CS Laboratoire de Chimie des Polymeres Organiques, UMR CNRS-ENSCPB,  
Universite Bordeaux 1, Talence, 33402, Fr.  
SO Polymeric Materials Science and Engineering (1997), 77,  
126-127

CODEN: PMSEDG; ISSN: 0743-0515

PB American Chemical Society

DT Journal

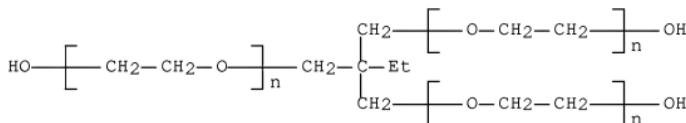
LA English

AB Dendritic poly(ethylene oxides) up to fourth generation was obtained. A tin compd. serving as a new branching agent was designed for the arborization step. The polymn. of ethylene oxide was carried out in DMSO, this solvent turned out to be far better than THF as no aggregation of alcoholate was obsd. The characterizations by size exclusion chromatog. revealed that the behavior of these architectures was strongly affected by the dendritic pattern and by the presence of terminal hydroxyl functions. The samples obtained indeed exhibited different soln. properties depending on the ratio of the total no. of hydroxyl groups to the molar mass of the dendrimer.

IT 50586-59-9P  
(intermediate; synthesis of poly(ethylene oxide)  
dendrimers)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with  
2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



CC 35-4 (Chemistry of Synthetic High Polymers)

ST polyethylene oxide dendrimer prepн tin deriv

IT Dendritic polymers  
(starburst; synthesis of poly(ethylene oxide)  
dendrimers)

IT 50586-59-9P  
(intermediate; synthesis of poly(ethylene oxide)  
dendrimers)

IT 67-68-5, DMSO, uses  
(solvent; for synthesis of poly(ethylene oxide))

dendrimers)

IT 195065-49-7P 195065-50-0P  
(synthesis of poly(ethylene oxide) dendrimers)

L74 ANSWER 7 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 110:58212 HCA Full-text

OREF 110:9655a,9658a

TI Synthesis of star-shaped poly(ethylene oxide)

AU Gnanou, Yves; Lutz, Pierre; Rempp, Paul

CS Inst. Charles Sadron, Strasbourg, 67083, Fr.

SO Makromolekulare Chemie (1988), 189(12), 2885-92

CODEN: MACEAK; ISSN: 0025-116X

DT Journal

LA English

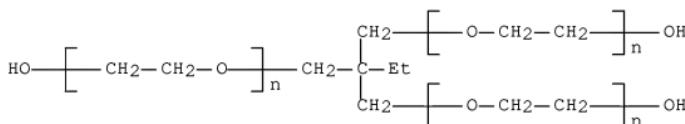
AB Three different methods to synthesize star-shaped poly(ethylene oxide) are discussed. In all three cases, the branches are grown from a plurifunctional initiator. It is established that even though the early stages of the polymn. occur in heterogeneous phase, the consequences on the polymers formed are of minor importance. The most significant method is a core-first process, involving multifunctional polydivinylbenzene cores as the initiating species, made anionically in dil. soln. Although strong assocn. phenomena are occurring during the growth of the branches, star-shaped poly(ethylene oxides) with a high no. of functionalized branches are obtained. The polymers arising from all three methods were characterized accurately.

IT 50586-59-9P

(prepn. and characterization of)

RN 50586-59-9 HCA

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2-ethyl-1-(hydroxymethyl)-1,3-propanediol (3:1) (CA INDEX NAME)



CC 35-7 (Chemistry of Synthetic High Polymers)

ST polyethylene glycol star branched; divinylbenzene oxirane star graft polymer

IT Polymerization

(star, of oxirane, methods for)

IT 10060-17-0, Diphenylmethylpotassium

(catalysts, for polymn. of oxirane in presence of trimethylolpropane to three-arm star polymers )

IT 4216-48-2, Potassium naphthalene  
(catalysts, in polymn. of oxirane on divinylbenzene polymers or (hydroxyethyl)styrene polymers, in star -shaped polymer prepn.)  
IT 50536-59-9P  
(prep. and characterization of)

L74 ANSWER 8 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 110:9838 HCA Full-text

OREF 110:1765a,1768a

TI Marking inks for smooth writing boards

IN Nagasawa, Toshiyuki

PA Orient Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 63043981 A 19880225 JP 1986-187364

198608  
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JP 05069869 B 19931001

PRAI JP 1986-187364 19860808 <--

AB Easily-erasable title inks, useful for writing on boards made of ceramics, plastics, metals, etc., contain alcs. and/or glycols, colorants, resins, and branched alkylene glycol condensates and/or branched esters of branched higher fatty acids. Thus, 20 parts a milled base comprising Solmix AP-21 (I, modified EtOH), Denka Butyral 3000-2, and Fast Red RC Conc. was blended with 72 parts I, 7 parts Bu oleate (II), and 1 part glycerin-propylene oxide adduct (III) to give an ink. A marking pen contg. the ink gave markings on an enamel-surfaced board with good drying properties and erasability even at 60-80% humidity, vs. poor and poor, resp., for the ink contg. dioctyl azelate and Hitenol NE05 instead of II and III.

IT 9082-00-2

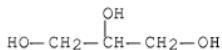
(marking inks contg., for smooth writing boards, erasable)

RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5  
CMF C3 H8 O3



CM 2

CRN 9003-11-6  
CMF (C3 H6 O . C2 H4 O)x  
CCI PMS

CM 3

CRN 75-56-9  
CMF C3 H6 O



CM 4

CRN 75-21-8  
CMF C2 H4 O



IC ICM C09D011-16  
ICS C09D011-16

CC 42-12 (Coatings, Inks, and Related Products)

IT 57-50-1D, esters 93-34-5 142-77-8, Butyl oleate

9082-00-2 25791-96-2 41669-30-1, Isostearyl isostearate  
68171-33-5, Isopropyl isostearate 69650-15-3 98825-32-2,  
Phthalocyanine Green NY 117925-73-2, Paliogen Blue FA 7293  
(marking inks contg., for smooth writing boards, erasable)

L74 ANSWER 9 OF 10 HCA COPYRIGHT 2008 ACS on STN  
AN 92:130469 HCA Full-text  
OREF 92:21273a,21276a  
TI Fiber lubricant properties and dynamic mechanical properties of polyoxyalkylene fluids  
AU Koenig, H. Steve; Bryant, George M.  
CS Res. Dev. Dep., Union Carbide Corp., South Charleston, WV, 25303, USA  
SO Textile Research Journal (1980), 50(1), 1-5  
CODEN: TRJOA9; ISSN: 0040-5175  
DT Journal  
LA English  
AB Fiber friction properties of polyoxyalkylene lubricants are influenced by the viscoelastic properties of the fluid. Irresp. of the ethylene oxide/propylene oxide compn., the structure (linear or branched) of the polymer dets. the dependence of glass temp. (Tg) and the sliding speed for max. frictional force (Umax) upon the no.-av. mol. wt. (Mn). The branched polyoxyalkylene triols unexpectedly displayed decreasing Tg and const. Umax as a function of Mn, contrary to the increasing Tg and decreasing Umax shown by the linear polyoxyethylene monoethers and diols with increasing Mn. The difference in the frictional dynamic properties of the linear and branched polymers appears to be a function of the bulk fluid H-bonding mode. The intramol. H-bonded branched polymers exhibit decreasing Tg and the intermol. H-bonded linear polymers displayed increasing Tg as a function of Mn.

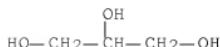
IT 9082-00-2  
(lubricating properties of, for fibers, effect of chain branching, hydrogen bonding, and glass temp. on)

RN 9082-00-2 HCA

CN Oxirane, 2-methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1) (CA INDEX NAME)

CM 1

CRN 56-81-5  
CMF C3 H8 O3



CM 2

CRN 9003-11-6  
CMF (C<sub>3</sub> H<sub>6</sub> O . C<sub>2</sub> H<sub>4</sub> O)x  
CCI PMS

CM 3

CRN 75-56-9  
CMF C<sub>3</sub> H<sub>6</sub> O



CM 4

CRN 75-21-8  
CMF C<sub>2</sub> H<sub>4</sub> O



CC 39-8 (Textiles)  
IT 9003-11-6 9003-13-8 9082-00-2 25322-69-4 25791-96-2  
(lubricating properties of, for fibers, effect of chain  
branching, hydrogen bonding, and glass temp. on)

L74 ANSWER 10 OF 10 HCA COPYRIGHT 2008 ACS on STN

AN 89:25297 HCA Full-text

OREF 89:3937a,3940a

TI Polyethers for polyurethane plastics

IN Kubica, Zofia; Rudnicki, Krzysztof; Grzywa, Edward; Wojciechowski,  
Jerzy; Lisiak-Spadlo, Marianna; Weber, Krystian; Hetper, Irena

PA Instytut Ciezkiej Syntezy Organicznej "Blachownia", Pol.

SO Pol., 4 pp.

CODEN: POXXA7  
DT Patent  
LA Polish  
FAN.CNT 1

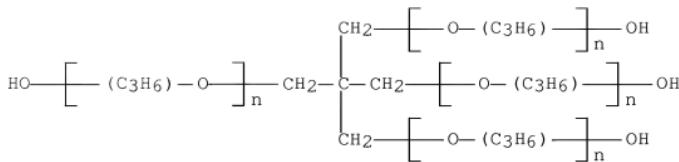
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 90114	B1	19770131	PL 1974-168072	197401 12
	HU 170994	B	19771028	HU 1975-II206	197501 08
	DD 116466	A5	19751120	DD 1975-183590	197501 10
	SU 578894	A3	19771030	SU 1975-2096110	197501 10
	CS 183781	B2	19780731	CS 1975-201	197501 10

PRAI PL 1974-168072 A 19740112 <--  
AB The title polyethers (I) contg. bound P were prep'd. by polyaddn. of alkylene oxides and/or epichlorohydrin to H3PO4 (contg. 74-76% P2O5) in presence of polyethers (prep'd. by polyaddn. of alkylene oxides and/or epichlorohydrin to compds. contg. 2-6 OH groups, oxyalkylenated PhOH-HCHO resins, or branched -chain polyethers contg. arom. rings). Thus, polyether [prep'd. by reaction of 136 parts C(CH2OH)4 with 348 parts propylene oxide (II)] 100, H3PO4 20, epichlorohydrin 37, and II 50 parts were mixed at 60-90° under 3 atm pressure, the whole was stirred 2 h at 90°, and excess II was removed in vacuo to give I contg. 3% P and 7% Cl, which was used to prep. rigid polyurethane foam.

IT 9051-49-4D, reaction products with epichlorohydrin and phosphoric acid  
(for manuf. of polyurethane foams)

RN 9051-49-4 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (CA INDEX NAME)



IC C08G065-00

CC 36-2 (Plastics Manufacture and Processing)

IT 7664-38-2D, reaction products with polyether polyols and epichlorohydrin 9051-49-4D, reaction products with epichlorohydrin and phosphoric acid (for manuf. of polyurethane foams)

=> P L85 1-3 BTB ABS HITSTR HITIND

L85 ANSWER 1 OF 3 HCA COPYRIGHT 2008 ACS on STN

AN 141:128474 HCA Full-text

TI Two-phase roll-on cosmetic product containing a polymer and a polysiloxane

IN Fei, Lin; Chopra, Suman; Patel, Neeta

PA Colgate-Palmolive Company - USA

SO U.S. Pat. Appl. Publ. 11 pp.

50 U.S. Pat. App.  
COHEN, USXXCO

CODEN:

D1 Patent English

LA Engl

FAN.CNT 1		KIND	DATE	APPLICATION NO.	DATE
PATENT NO.		-----	-----	-----	-----
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PI	US 20040141934	A1	20040722	US 2003-346834	200301 17
				<--	
	AU 2004206882	A1	20040805	AU 2004-206882	200401 16
				<--	
	CA 2513152	A1	20040805	CA 2004-2513152	200401

WO 2004064792

A1

20040805

WO 2004-US1218

<--  
200401  
16

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,  
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,  
 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
 MX, MZ

EP 1589935

A1

20051102

EP 2004-703009

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200401  
16

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
 PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,  
 SK

BR 2004006790

A

20060117

BR 2004-6790

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200401  
16

MX 2005PA07590

A

20050930

MX 2005-PA7590

<--  
200507  
15

&lt;--

PRAI US 2003-346834

A

20030117 &lt;--

WO 2004-US1218

W

20040116

AB A two-phase, elastomer-free, low viscosity, high water roll-on antiperspirant and/or deodorant compn. comprises: (A) a non-polar phase having a viscosity up to 200 cP and comprising: (a) 0.1 to 40 wt.% of a volatile and/or a nonvolatile silicone selected from the group consisting of linear and cyclic organo-substituted polysiloxanes, wherein the viscosity is less than 5 cSt for volatile silicones and in the range of 5 to 20 cSt for non-volatile silicones; (b) 0 to 25 wt.% of a straight or branched chain hydrocarbon polymer which has an av. mol. wt. in the range of 450 to 6000 daltons; (c) 0 to 15 wt.% of one or more of a selected low viscosity, lipophilic emollient; and (B) a polar phase having a viscosity in the range of 10 to 2000 cP and comprising: (a) at least 5 wt.% of an antiperspirant active; (b) an aq. component comprising at least 40% water and a sufficient amt. of a C2-3 alc., a glycol or a polyhydric alc. so that the antiperspirant active is dissolved in the aq. component; and (c) a selected thickening agent. The ratio of oil phase to water phase of the compn. is in the range of 15:85 to 40:60, whereby the compn. is able to form a temporarily stabilized emulsion after shaking for a period not exceeding 24 h. For example, a compn.

comprised a nonpolar phase A contg. cyclomethicone 16.10%, Emulsogen SRO 0.10%, PPG-3 myristyl ether 3.00%, and fragrance 0.80, and a polar phase B contg. antiperspirant active 67.00%, propylene glycol 4.00%, Polymer JR 0.20%, and alc. (100%) 8.80%.

IT 75-21-8D, Ethylene oxide, polymers  
(two-phase roll-on antiperspirant and/or deodorant compn.  
comprising polymer and polysiloxane)

RN 75-21-8 HCA

CN Oxirane (CA INDEX NAME)



IC ICM A61K007-32

INCL 424065000

CC 62-4 (Essential Oils and Cosmetics)

IT Alcohols, biological studies  
(fatty, propoxylated; two-phase roll-on antiperspirant  
and/or deodorant compn. comprising polymer and polysiloxane)

IT Alcohols, biological studies  
(polyhydric; two-phase roll-on antiperspirant and/or  
deodorant compn. comprising polymer and polysiloxane)

IT 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol,  
biological studies 65-85-0D, Benzoic acid, esters 67-63-0,  
Isopropyl alcohol, biological studies 75-21-8D, Ethylene  
oxide, polymers 1320-67-8, Propylene glycol methyl ether  
2398-99-4, Hexadecanoic acid octadecyl ester 9003-27-4D,  
Polyisobutene, hydrogenated 9003-29-6, Polybutene 9004-62-0,  
Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose  
9004-98-2, Oleth 10 9005-25-8, Starch, biological studies  
9006-65-9, Dimethicone 9016-00-6, Dimethyl polysiloxane  
13945-76-1, Dodecanoic acid dodecyl ester 24271-12-3, Docosanoic  
acid octadecyl ester 24800-44-0, Tripropylene glycol 25265-71-8,  
Dipropylene glycol 63793-60-2, PPG-3 myristyl ether 134910-86-4,  
Aluminum zirconium tetrachlorohydrex gly 314241-95-7, DC 5225C  
(two-phase roll-on antiperspirant and/or deodorant compn.  
comprising polymer and polysiloxane)

L85 ANSWER 2 OF 3 HCA COPYRIGHT 2008 ACS on STN

AN 111:148918 HCA Full-text

OREF 111:24745a,24748a

TI Active agents such as pharmaceuticals and pesticides entrapped in  
polymethacrylate lattices

IN Abrutyn, Eric S.; Chromecek, Richard C.; Scarfo, Louis J.

PA Dow Corning Corp., USA  
SO Eur. Pat. Appl., 36 pp.  
CODEN: EPXXDW

DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 252463	A2	19880113	EP 1987-109662	198707 04
				<--	
	EP 252463	A3	19890712		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	US 4855127	A	19890808	US 1987-53609	198705 20
				<--	
	AU 8774919	A	19880114	AU 1987-74919	198706 29
				<--	
	AU 612114	B2	19910704		
	BR 8703406	A	19880322	BR 1987-3406	198707 06
				<--	
	CA 1316902	C	19930427	CA 1987-541340	198707 06
				<--	
	JP 63218765	A	19880912	JP 1987-167951	198707 07
				<--	
	ES 2006518	A6	19890501	ES 1987-1982	198707 07
				<--	
PRAI	US 1986-882609	A	19860707	<--	
	US 1987-53609	A	19870520	<--	
	US 1981-246663	A2	19810323	<--	
	US 1984-683603	A2	19841212	<--	
AB	A solid, lattice-entrapped noncosmetic functional material compn. comprises 5-95% by wt. crosslinked hydrophobic comb-like polymer and 95-5% by wt. water-insol. liq. or solid functional material which is				

uniformly dispersed in the polymer matrix. The functional material include pesticides, pheromones, pharmaceuticals, microbicides, sunscreens, light stabilizers, food flavorants, pigments, or synthetic insect attractants. A mixt. contg. 60% lauryl methacrylate-40% ethylene glycol dimethacrylate and Grandlure in a 40:60 ratio was heated in a 4.5 mm diam. test tube and cut into plugs 15 mm long. These plugs were suspended in polycarbonate tubing and air was blown around them at 1 L/min at 20° and 10-15% relative humidity; the release of pheromone, as followed by the wt. loss of the sample, from the sample was 1.5 + 10-4 g/h. for 50 days.

IC ICM C08F220-10  
ICS C08F002-44; A01N025-10; A61K009-22; A61K047-00; A23L001-22;  
A23L001-236; A23L001-275

CC 5-4 (Agrochemical Bioregulators)  
Section cross-reference(s): 17, 62, 63

IT Bactericides, Disinfectants, and Antiseptics  
Herbicides  
Pesticides  
Juvenile hormones  
Paraffin oils  
Petrolatum  
    Petroleum spirits  
Pheromones  
Pyrethrins and Pyrethroids  
Soybean oil  
    (hydrophobic polymer lattice matrix contg., sustained-release)

IT Alcohols, esters  
    (polyhydric, esters, with  $\alpha,\beta$ -unsatd.  
    carboxylic acids, polymers with monounsatd. monomers, lattice  
    matrix, for functional materials)

IT Lanolin  
    (propoxylated, hydrophobic polymer lattice matrix  
    contg., sustained-release, Pentalyn H)

IT Carboxylic acids, esters  
    ( $\alpha,\beta$ -unsatd., esters, with polyhydric alcs.,  
    polymers with monounsatd. monomers, lattice matrix, for  
    functional materials)

L85 ANSWER 3 OF 3 HCA COPYRIGHT 2008 ACS on STN

AN 55:121821 HCA Full-text

OREF 55:22910e-h

TI Solid foams containing urethan groups

IN Nischk, Gunther; Braun, Gunther; Hoppe, Peter

PA Farbenfabriken Bayer Akt.-Ges.

DT Patent

LA Unavailable

FAN.CNT 1

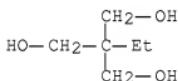
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 1097671		19610119	DE 1959-F28504	
				195905 23
GB 904789			GB	<--
US 3138562		19640623	US 1960-31252	
				196005 20
				<--

AB The foams were prep'd. from branched polyesters with polyalkylene glycol radicals (mol. wt.  $\geq$  400 and the alkylene groups of which contained  $\geq$  50%  $\geq$  2 C atoms) and of polyisocyanates, in the presence of water or low-boiling solvents. The polyesters also contained as cocondensates monomeric monobasic fatty acids. Thus, from tris(hydroxymethyl)propane 1370, adipic acid 292, phthalic anhydride 592, oleic acid 566, and propoxylated tris(hydroxymethyl)propane (OH no. 112, mol. wt. 1500) 620 parts was prep'd., at 195-200° and under N or CO<sub>2</sub> in a conventional manner, a polyester (I) of acid no. 0, OH no. 235, and viscosity at 50° 4000 cp. I (100 parts) mixed with an accelerator consisting of dimethylbenzylamine 1, 50% aq. sulfonated castor oil Na salt soln. 4, and hydroxylated polysiloxane 0.3 parts was foamed by the addn. of 84 parts tolylene diisocyanate. The resulting nonbrittle solid foam had a d. of 35 kg./cu. m., a tensile strength of 1.3 kg./sq. cm., an impact resistance of 0.33 kg./cm., a heat bending point of 142°, and a H<sub>2</sub>O absorbency of 0.4%.

IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
(and polypropylene glycol derivs., polyesters and polyurethans  
from)

RN 77-99-6 HCA

CN 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)- (CA INDEX NAME)



INCL 39B  
 CC 31 (Synthetic Resins and Plastics)  
 IT Porous materials  
     (from urethan polymers, from polyesters  
     branched with polyalkylene glycol radicals)

IT 77-99-6, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-  
(and polypropylene glycol derivs., polyesters and polyurethans  
from)